



PNWFM NEWSLETTER



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Mesolite and thomsonite from Spray, Oregon Copyright by Julian Gray



President's Message

Jessica Robertson

Happy Autumn! I hope you've all been able to enjoy some time digging and enjoying our beautiful summer weather. Unfortunately, the summer weather also included wildfires in the North Cascades and elsewhere, forcing us to cancel our planned PNWFM return to Washington Pass in August. Thanks to Markus Raschke for making a plan for the event, and we'll hope to return next year. In case you missed it, Markus has offered to analyze any of your unknown Washington Pass or re-

lated mineral. He would perform EDX and XRD as needed and share the results at the PNWFM Symposium in October. Please contact him at markus.raschke@colorado.edu if you wish to send him material for analysis.

Planning for our October symposium is in full swing. See the information on schedule and planned talks on the next pages. This year's theme is Rare Earth Element Minerals, with talks by LIST NAMES; registration and more information is available at pnwfm.org. Please watch our social media and website for information on how to watch our live stream and recorded talks. We would like to make this event our best and most exciting in years--to help us make this happen, please volunteer to help! We can use assistance in many ways: physical help with setup and take down (particularly help for display case setup on Friday afternoon!), donations of material for our silent auction and Saturday banquet option, and volunteer help running the auction and registration tables. If you are up to help us make this great event happen, please contact me at jar7709@hotmail.com or Thea Stender at Theasmineralworld@hotmail.com

Thank you and I look forward to seeing you all soon!

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RIP **Al Liebetrau**

Our condolences to Sue Liebetrau

Albert M. (Al) Liebetrau (1938-2023)

The global mineral collecting community lost a true friend and supporter on April 28 of this year. The Pacific NW Chapter of Friends of Mineralogy (PNWFM), especially, will miss Al Liebetrau. He and Sue, his wife of 63 years, were among the chapter's most prominent members, and could always be counted on for good cheer, conversation, and displays featuring outstanding classic specimens. Al was interested in almost everything, and in turn was always an interesting companion.

In 1960, when studying for his bachelors degree in mathematics in Madison at the University of Wisconsin, Al met Sue, a fellow student who was initially the collector in the family, mostly of fossils. They married in 1960, then both taught school for a bit, first in Wisconsin, where the Upper Peninsula's mineral wealth began to attract their interest, and then in Elgin, Illinois. Increasingly, the mathematics of crystals drew Al to appreciate minerals and their inherent beauty. With the Illinois fluorite fields nearby, they both inevitably became hooked, especially on fluorite.

With the help of a National Science Foundation (NSF) grant Al enrolled in masters degree studies at Oregon State University. He obtained his first advanced degree in mathematics, minoring in German. Their Oregon location provided an opportunity for Al and Sue to branch out into petrified wood, thunder eggs and obsidian. With additional NSF support, they returned to the University of Wisconsin, where Al got his Ph.D. in statistics, subsequently landing a teaching job at Johns Hopkins in Baltimore. In academia, however, research often accounts for more time and dedication than teaching, and Al liked to teach. After seven years they pulled up stakes to follow

a dream of living in the West, moving to the tri-cities area of Washington, where Al's statistics expertise and experience were much in demand at Hanford. After a short stint with Rockford International, Al joined Battelle Pacific Northwest Laboratories for the remainder of his career. Except! In 1998 the opportunity arose to go to Vienna for three years to work for the International Atomic Energy Agency as a U.S. Government-funded expert. With Al's background, German family roots and intense interest in minerals, this was a dream location. He and Sue relished the culture and food, acquired many new mineral friends and upgraded their already significant collection.

After returning to the U.S. they retired and moved to central Oregon, near Bend, even closer to petrified wood, fossils and thunder eggs than before, and to a home with almost enough space to house their collections. Yes, plural. Al's interest had been piqued by the phenomenon of fluorescence, and he became a major force in the world of fluorescent minerals. Eventually Al became president of the Fluorescent Mineral Society, and despite the onset of some health issues, with the help of others in the group Al coordinated the 50th (COVID-delayed) anniversary of the Society with some 50 cases at the 2022 Tucson Gem and Mineral Show (TGMS). His upbringing on a small, rural farm in Wisconsin had instilled a work ethic which never slackened.

Al and Sue were omnivorous collectors, and their collections were selective, but broad. A significant example outside the geological realm included Mata Ortiz pottery from Chihuahua, which they visited, becoming friends with the artists in order to help support them. They also had a selection of cacti and, at one time, a side business in shipping tropical fish.

Al was rarely seen at any show or when traveling without a camera around his neck (and this continued well into the cell phone age). He was the unofficial, and at times semi-official, photographer at the Tucson shows or PNWFM symposia, documenting most of the cases and all the awards.

Sue and Al won many of those awards themselves, at club shows and at the annual TGMS show, where at various times they garnered the Romero award for best Mexican specimen, the Bideaux prize for the best Arizona specimen, the Desautels prize for the best competitive exhibit and the coveted Lidstrom trophy for the best mineral in a competition case (a Chinese stibnite).

Al genuinely believed that men and women everywhere are created equal. His travels and innate kindness gave him a generally cheerful outlook, and he was quick to make friends and laugh at jokes. His serious side could be profound, and he was concerned about those less fortunate, whatever their background, and troubled by America's diminished willingness to address thoughtfully its complex problems.

By the time of the 2022 PNWFM Symposium last October Al was finding it harder to travel, but was determined to make it, which he did. Some of Al and Sue's closest friends were members of PNWFM, and we will all miss him.

Obituary provided by Bill Dameron

**FRIENDS OF MINERALOGY PACIFIC NORTHWEST CHAPTER
2023 SYMPOSIUM
RARE EARTH ELEMENT MINERALS
OCTOBER 20-22, 2023
KELSO, WASHINGTON**

Featuring presentations by Randy Becker,
Mandi Hutchinson, Markus Raschke, Brent Thorne, and
Glenn Waychunas



Floor and Room Mineral Dealers
World Class Mineral Displays
Silent and Live Auctions
Saturday Evening Banquet

Register at PNWFM.ORG



Check out the next few pages for the
Symposium registration form,
Schedule,
Call for exhibits
and
Dinner/Auction information

Friends of Mineralogy

Pacific Northwest Chapter

2023 Symposium: *Rare Earth Element Minerals*

October 20-22, 2023 at the Red Lion Hotel in Kelso, Washington

SHOW HIGHLIGHTS

Guest Speakers – Excellent talks on the show theme are scheduled all day Saturday and Sunday morning. Speakers include Randy Becker, Mandi Hutchinson, Markus Raschke, Brent Thorne, and Glenn Waychunas!

Main Floor Dealers – XTAL, Pacific Rim Gems & Minerals, Earth's Treasures, and Cascade Scepters.

Satellite Dealers – Located in first floor rooms in north wing of hotel. Dealers must be registered symposium attendee. Contact Thea Stender at theasmineralworld@hotmail.com

Exhibits – Fine mineral exhibits can be seen in the Main Floor area. Display cases provided by FM. Contact Bruce Kelley at bruce.kelley@gmail.com to reserve a display case.

Auctions – Silent auction ongoing during show hours and a spirited live auction during the Saturday night banquet. Donations needed! Contact Karen or Gary Hinderman at gkmhind@comcast.net.

OTHER INFORMATION

Main Floor Security – Badges provided for dealers and exhibitor at check-in. Only badge-wearing individuals allowed on floor during set-up, take-down, and off-hours.

Meals – The hotel will have breakfast service this year, and the bar will be open, but they do not offer dinner. We are hiring a caterer for our Saturday evening dinner and auction event.

ROOM RESERVATIONS

Attendees should make room reservations directly with Red Lion Hotel at 360-578-4017. Identify yourself as being with the PNWFM to obtain the special rate. *The hotel does not permit over-nighting in the parking lot.*

2023 PNWFM SYMPOSIUM REGISTRATION FORM

Register online at pnwfm.org or complete the form below and mail with a check
Mail fees and completed form to: Bruce Kelley, 351 Reef Rd, Nordland, WA 98358

Name(s): _____

Address: _____

City: _____ **State:** _____ **Zip:** _____

Phone: _____ **E-mail:** _____

General Registration (Includes membership, symposium registration, and Saturday dinner)

Before Oct. 1: \$140 x _____ registrants = \$ _____

After Oct. 1: \$150 x _____ registrants = \$ _____

Symposium Only (membership, symposium registration, no dinner):

Before Oct. 1: \$115 x _____ registrants = \$ _____

After Oct. 1: \$125 x _____ registrants = \$ _____

STUDENT: Symposium Only (membership, symposium):

With Dinner: \$85 x _____ registrants = \$ _____

No Dinner: \$60 x _____ registrants = \$ _____

☐ I already purchased or renewed PNWFM Membership in 2023, subtract \$20

☐ Add-on room dealer fee, \$25

Total enclosed: \$ _____





PACIFIC NORTHWEST FRIENDS OF MINERALOGY
2023 Symposium
Rare Earth Element Minerals
October 20-22, 2023



FRIDAY, OCTOBER 20, 2023

12:00 am	DEALER & EXHIBITOR SET-UP
5:00 pm	MAIN FLOOR OPENS
9:00 pm	MAIN FLOOR CLOSES

SATURDAY, OCTOBER 21, 2023

8:00 am	MAIN FLOOR OPENS	
9:00 am	Introduction and introductory remarks	Jessica Roberston and Julian Gray
9:05 am	Rare Earth Elements - An Overview of REE Occurrence, Importance, and Mineralogical Interest	Mandi Hutchinson
10:00 am	BREAK	
10:15 am	Cascade Crystals: An Introduction to Crystal Localities of the Cascades	Randy Becker
11:15 am	Rare-earth and rare element mineralogy of the Golden Horn Batholith - new research into a globally unique alkaline system	Markus Raschke
12:15 pm	MORNING SESSION ENDS	
2:00 pm	REE as activators of striking luminescence in minerals: Examples in apatite, fluorite and calcite	Glenn Waychunas Virtual presentation
3:00 pm	Rare Earth Element Minerals	Brent Thorne
4:00 pm	AFTERNOON SESSION ENDS	
6:00 pm	BANQUET AND LIVE AUCTION	

SUNDAY, OCTOBER 22, 2023

8:00 am	MAIN FLOOR OPENS	
8:00 am	FM BUSINESS MEETING	
9:00 am	Pikes Peak or bust – from golden past to rare earth future?	Markus Raschke
10:00 am	Closing Remarks	Jessica Robertson
10:05 am	SYMPOSIUM ENDS, MAIN FLOOR CLOSES	

2023 Symposium – Call for Exhibits

Display some of your collection!

The heart of a mineral show is always the display cases. Everyone looks at them, studies them... even drools over them! Please consider displaying part of your collection at this year's symposium. We have 12 cases and only a few are spoken for at the time of this notice. Some things to consider:

Cases are **not** required to be "on theme."

You do not need to have museum quality specimens to make an interesting display!

The best guideline is to put together a display that YOU would stop to look at.

This year's theme may be better suited to micro-mineral specimens so consider getting creative: Perhaps add photos or an in-case slide show?

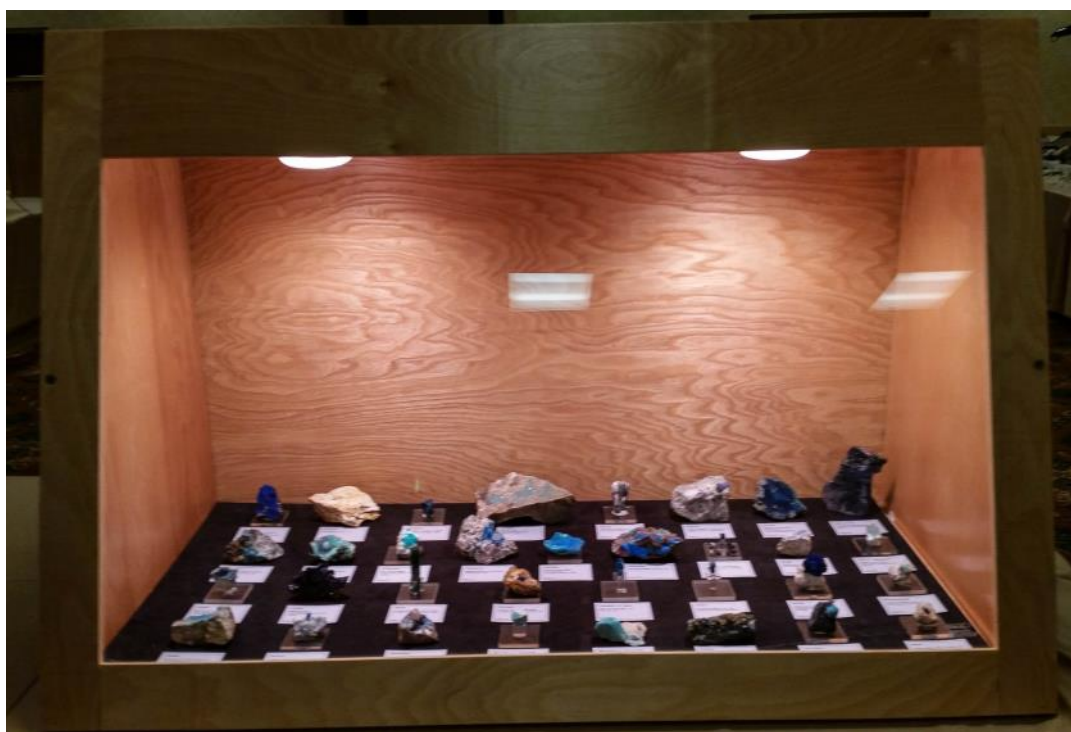
Cases are bolted together after you place your display inside. We will have security sleeping in the room with the cases on Friday and Saturday night.

The case dimensions are 43-1/8" wide x 22-1/2" deep x 27-3/8" high. The fronts slope in at the top. You can find detailed instructions on our web site:

<http://pnwfm.org/wp-content/uploads/2023/09/ShowCaseInstructions.pdf>

We have a variety of case liners available, so you do not need to make your own.

Contact Bruce Kelley – bruce.kelley@gmail.com to reserve a case.



Auctions and Dinner

Dinner Saturday Evening Will Be Catered By Mississippi Delta BBQ.



We will have pulled pork, smoked chicken, potato salad, cole slaw, baked beans, dinner rolls, 3 sauces, and smoked portobellos. We have to guarantee them 80 dinners, so we need to sell out! Please sign up for dinner when you register.

Also, after dinner is our live auction. Please plan on attending and participating.

Don't forget our silent auctions that will run starting Friday evening through Sunday morning. We need generous donations for both our silent auctions and the live auction. Also, we will need generous bidding! All satellite and main dealers need to provide at least one specimen for the live auction. Your generosity, as always, is much appreciated.

Eye Candy



Pinalite from Mammoth-Saint Anthony Mine, Tiger, Mammoth Dist., Pinal Co., AZ

Bruce Kelley specimen, ID by Dan Evanich, Keyence photo by Michael Cox

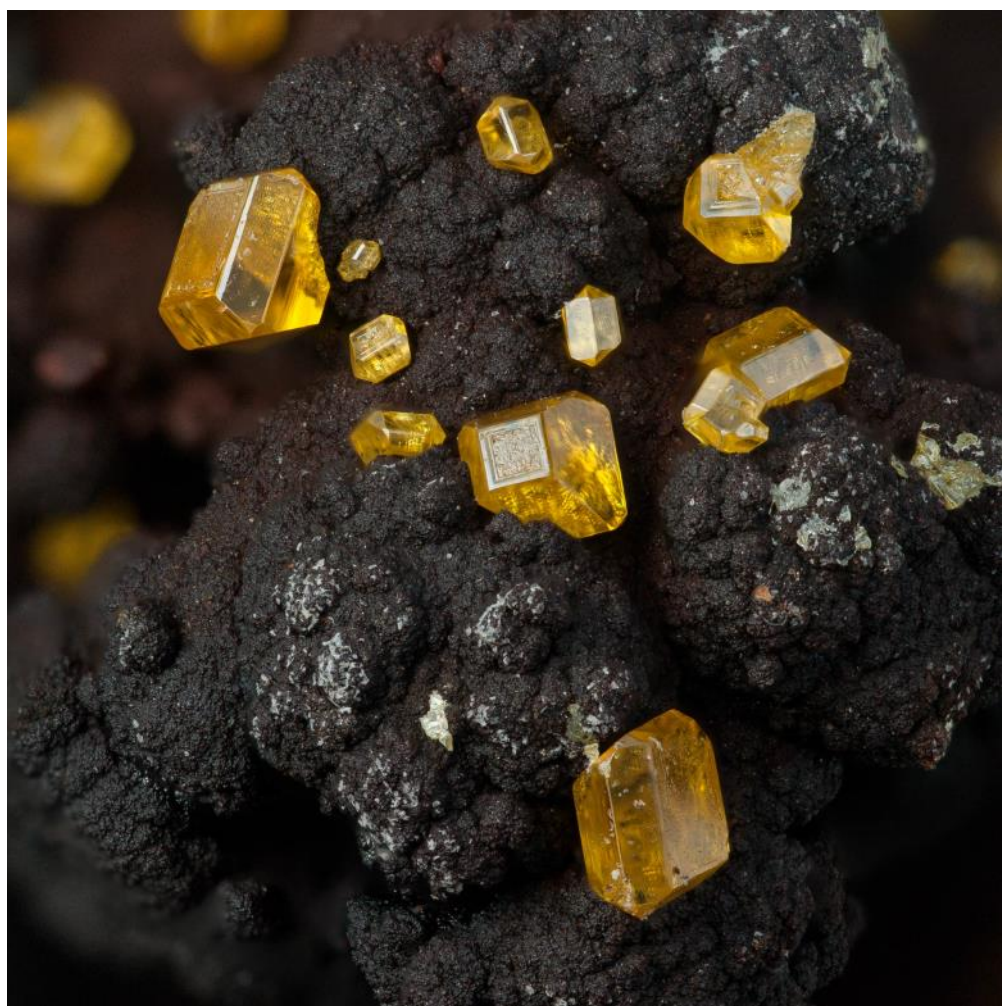
FOV: 340 x 250 µm

Wulfenite from Whim Creek
Copper Mine, Roebourne
Shire, Pilbara Region, WA,
Australia

Bruce Kelley specimen and
photo

Ex. Charlie Hall micromount
collection

FOV: 3.9 mm





Mixite from Lower Dump, North Star Mine, Tintic District, Juab Co., UT
Bruce Kelley Specimen and Photo,
Collected by Wes Gannaway
From NCMA Giveaway tables
FOV: 1.5 mm



Feynmanite from Markey Mine,
Red Canyon Dist., San Juan Co.,
UT
Bruce Kelley specimen and photo
Obtained at 2023 NCMA auction
FOV: 1.0 mm

A Plea from Your Editor



I have been making a request for more articles from the members and I have received a few and many very nice pictures. My worry is that they are all from my micro-mount friends and this newsletter is turning into one ONLY about micro minerals.

Now, that may be all right with many of our members but I am sure that there are some of you out there who would like to know what our large specimen collectors are doing, where they are collecting, and what they have in their collections.

Please, please, I need your input before this newsletter becomes so focused on micros that we loose some members. Maybe having articles on larger specimens might also attract some new members and grow our chapter.



Please email me, Beth Heesacker - heesacker@coho.net , with your comments, pro or con. Thank you.

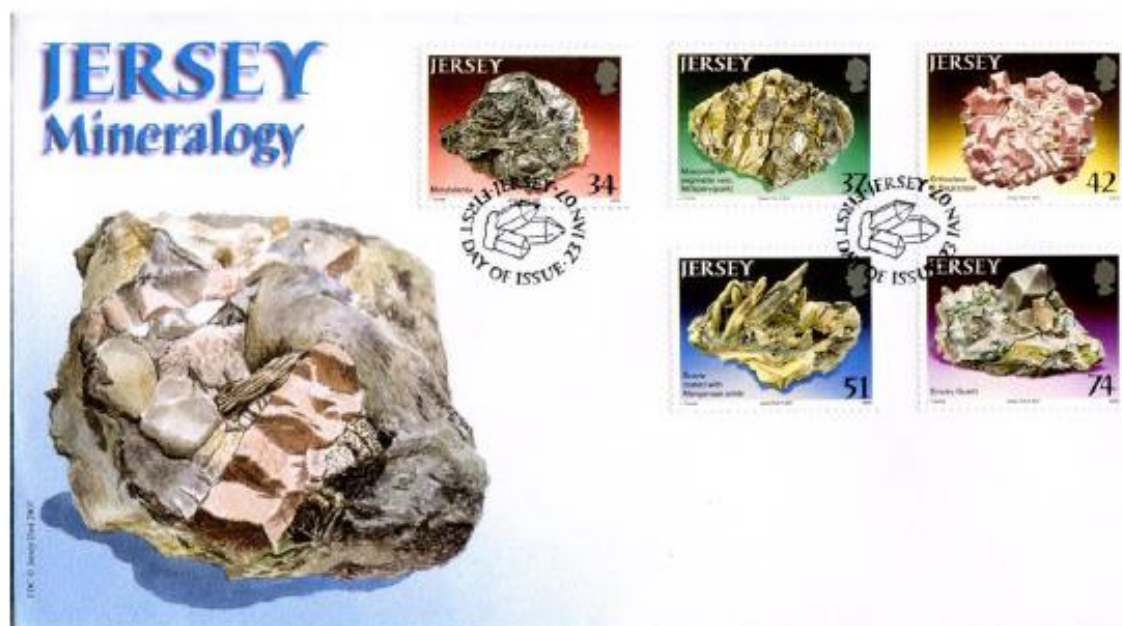
Micromineral Postage Stamps

Michael Dunmore

I'm probably just like every other BMS member, with few recent opportunities for collecting minerals, or buying micromounts at events such as the symposium. But from this frustration, I found a new interest: postage stamps with minerals pictured on them. And over recent months I've started a collection of mineral stamps and to research the topic.

I've not previously had an interest in postage stamps. But my starting point was the thought that there must be lots of interesting British stamps carrying pictures of minerals. Surely Great Britain's history of mining, mineral collecting, engravings published by Rashleigh and Sowerby, and museum collections must have been commemorated. But unfortunately, there are no British mineral stamps. The 'closest' I've found is set issued by Jersey in 2007:

Worn down by lockdown and self-isolation, Michael battled back by starting a new mineral collection. Postage stamps.



First day cover of Jersey Mineralogy. Molybdenite, muscovite in pegmatite vein, orthoclase and plagioclase, quartz coated with manganese oxide, Smoky Quartz
Stamp size 30 x 40 mm. Offset lithography.

This disappointing truth didn't reduce my enthusiasm, as searching online I'd found what I thought were very attractive images. And fortunately, mineral stamps are typically inexpensive to buy. As a rule of thumb, a stamp will cost about the same as a micromount specimen. Ironically, if you buy stamps online, the postage costs will probably be greater than the cost of the stamps you've selected.

Most of the mineral stamps I've collected have illustrations or photographs of what appear to be 'hand-specimens'. But some might appeal specifically to people who enjoy microminerals. What follows includes examples of the micromineral stamps I've found.

To give some context to the development of the design of mineral stamps, I believe the earliest mineral stamps were issued by Switzerland in 1958.



Fluorite, garnet, quartz. 25 x 30mm. Photogravure.

Between 1958 and 1961, Switzerland issued an annual series of *Pro Patria* stamps, which included images of minerals (as well as fossils, flowers and figurative studies). Translated from Latin, *pro patria* means *for one's country*. These stamps were sold at a premium, with a supplement above the 'normal cost' given to charities, including the Red Cross. For these stamps, the supplement is indicated by '+10'.

For microminerals, the earliest I've found were issued by North Korea in 1986. This is a group of three minerals, which form part of a set of six stamps. The other three stamps have pictures of mushrooms.



Lengenbachite, rhodochrosite, annabergite. 45 x 35mm. Offset lithography.

Many people would enjoy taking photographs of microminerals like these. Unfortunately, the impact of the images is reduced by the quality of the printing, which feels too dark and lacking definition and colour separation.

The next date in our timeline takes us to 1989 and a set of stamps issued by Liechtenstein. These were followed in 1994 by a further set of similarly designed stamps. These sets give the appearance of having been designed by someone who appreciated beautifully balanced compositions when looking at them through a microscope. Finding so much artistry condensed in such a small space will probably resonate with micromounters, and people who enjoy photographing microminerals.



Faden quartz (1989), strontianite (1994). 28 x 41 mm. Photogravure and recess.

Between the issuing of these two sets in Lichtenstein, Monaco issued a set of six stamps in 1990 with the word “microminéraux” on each one. Counterintuitively for images of microminerals where the guiding principle is normally “realistic with lots of detail, please”, this set has artistic licence, bold colour and jaunty typography.



Anatase, Albite, rutile, chlorite, brookite, quartz. 32 x 41 mm. Offset lithography.

This set celebrates minerals found in the mountainous Parc National du Mercantour - which is in southern France and a home to wolves - but inaccessible by super-yacht. (Also, looking at the illustration for Brookite (4,00), does this remind you of a scene from Little Red Riding Hood?) Those wolves get everywhere.

As a contrast to these colourful illustrations, we can journey north to the granite cobbles of Belgium. In 2003, Belgium issued a set of five micromineral stamps:



Calcite, quartz, baryte, galena, turquoise. 28 x 40mm. Photogravure.

With the common use of stacking software and sophisticated photographic equipment by amateur photographers today, these images may now appear to lack the detail and lighting we have come to expect from fine examples of micromineral photography.

In a similar vein, Slovenia issued several stamps of microminerals between 1999 and 2007, with both illustrations and photographs of microminerals, including these shown below.



Dravite (2000), Baryte (2003), Aragonite (2007). 29 x 40mm. Offset lithography.

We can then see a significant jump forward in the quality of micromineral stamps, with two stamps issued by Switzerland in 2014 to commemorate the International Year of Crystallography.



Epidote, amethyst. 44 x 41mm. Offset lithography and metallic stamping.

The high-quality images and the production of these stamps gives greater definition than those published by Slovenia and Belgium. The Swiss issues are further enhanced by the use of silver foil to lift the lettering of the mineral names and the illustrations of the crystal structures.

As a visual contrast to this style photography, we have two stamps from Germany which are part of a series on the theme of microworlds, and were issued in 2019.



Palladium, Moon rock. 33 x 39mm. Offset lithography.

The image of palladium is at a magnification of 230 times. It was created by Manfred Kage, a pioneer of photomicrography who died in 2019. The image of moon rock shows a magnification of 30 times. This stamp was issued to commemorate the 50th anniversary of the first manned moon landing.



Finally, our micromineral timeline ends in 2021. In 2020 and 2021 nine collectors' stamp sheets (with a common design) were 'issued' by Chad, Central African Republic, Djibouti, Guinea, Guinea-Bissau, Maldives, Niger and Togo. There is discussion and disagreement amongst philatelists as to whether some issues are really postage stamps, and an accusing finger might be pointed at these sheets. There is not enough space to explore this topic here, but as Oscar Wilde never said: "To ignore one issue of microminerals would be misfortune, to ignore nine would be careless."

Azurite, cuprite, duftite, ludlockite, smithsonite, tsumcorite, tsumebite, willemite. Sheet size 193 x 117mm. Stamp size 40 x 50mm. Offset lithography.

Each collectors' stamp sheet comprises eight stamps, with each stamp displaying a photograph by Christian Rewitzer. At the time of writing, the mining locations featured are: Alcantrilla, Spain; Bou-Azzer, Morocco; El Dragon, Bolivia; Hagendorf-Süd, Germany; Långban, Sweden; Laurion, Greece; Moctezuma, Mexico; Rodalquilar, Spain and Tsumeb, Namibia (illustrated above). The minerals presented are of those found at each mine, and for some locations; include type specimens.

These collectors' stamp sheets, in particular, may appeal to micromount enthusiasts. They may also provide inspiration to contributors to this newsletter, given the quality of their images published in every issue.

Via British Micromount Society Newsletter, 114, Nov 2021

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*Caledonite, with susannite epitaxially overgrowing leadhillite  
Red Gill Mine, Caldbeck Fells, Cumberland*

*FOV 5 mm*

*Photo Richard Bell*

Via British Micromount Society Newsletter, 114, Nov 2021





## News from the Rice Museum

### MYSTERY MINERAL DAY

SAT, SEP 23RD

10AM-2PM

Bring up to five of your unidentified rocks or minerals to the museum – our panel of experts will tell you what they are!

We will also have a host of fun activities, including geode cracking, thunder egg cutting, and two pop-up shops: Artemisia Minerals and WinterSky Art.

Free for members. General admission prices for non-members. Geode cracking and thunder egg cutting priced separately.

### ARTEMISIA MINERALS AND WINTERSKY ART

SAT AND SUN, SEP 23RD-24TH

10AM-5PM

Stop by the museum on **Saturday or Sunday** and shop **beautiful Oregon rocks and minerals** available from **Artemisia Minerals**, and **stunning handcrafted jewelry** by **WinterSky Art**!

**Artemisia Minerals** is a local business run by couple Ben and Helen, who collect local minerals from all around Oregon. Their name, Artemisia, derives from the Artemisia plant. Some of their most beautiful specimens they've collected include picture jasper and jelly opal.

**Winter** makes all their pieces by hand, drawing on spirit for inspiration and guidance. They are made with intention, spiritual direction, and mindfulness. The combinations of stones are dictated by the feel of the stones themselves as Winter assembles the piece.

### DAY OF PLAY

SAT, SEP 30TH

10AM-2PM

We are participating in **Our World: Worldwide Day of Play**, a global play event presented by **Nickelodeon** and the **Association of Children's Museums**. This is a day dedicated to experiencing joyful learning through play, focusing on getting kids and their families up, out, and playing around.

We will be playing with **geodes**! There will be **geode cracking, crafts, activities, and more**.

**Free** for members. **General admission prices** for non-members. Geode cracking priced separately.

## More Upcoming Events at the Rice Museum

**Sat, Oct 28th:** Halloween at the Museum

**Sat and Sun, Oct 28th and 29th:** Pop-up Shop with Artemisia Minerals

**Sat, Nov 18th:** Diamonds and Diorite: A Minecraft Day

**Sat and Sun, Nov 18th and 19th:** Pop-up Shop with Artemisia Minerals

**Sat, Nov 25th:** Garage Sale

The Rice Northwest Rock and Mineral Museum is located  
25 minutes from downtown Portland, Oregon, on Highway  
26 West at the Helvetia Rd./Brookwood Exit 61B.

26385 NW Groveland Drive,  
Hillsboro, OR 97124

# CRYSTAL RESEARCH

9112 Tucker Road SE , Olympia, WA 98513-8904 TEL: (360) 459-2455 [query@crystal-research.com](mailto:query@crystal-research.com)

## MINERAL COLLECTION FOR SALE

Crystal Research, in Olympia, Washington, is closing its laboratory and selling its mineral collection, consisting of

- A Dana collection of about 2,100 specimens, mostly thumbnail or miniature, assembled between 1956 and 2005 as a reference collection for optical and crystal growth research. The specimens, ranging from thumbnail to 10", were purchased from dealers from 1945 to 2005.
- About 650 thumbnail specimens from the collection of Fr. Alvin Hufnagel. purchased from Ward's between 1942 and 1949 and trimmed to  $\frac{3}{4}$  x 1".
- Specimens collected between 1947 and 1970, mostly as-collected and untrimmed, from Franklin, New Jersey (1947), Laven, Langsunfjord, Norway (1960), Ivigtut, Greenland (1960), Herringen, Germany (1960), Roseclaire, Illinois (1967), and other notable localities.
- The locality sets include a few large showy specimens such as fluorite crystals from Roseclaire and a 6" x 7" x 13" water-clear halite cleavage from Carlsbad.

We will conduct an email version of a silent auction during the rest of the year. Preference will be given to bids for the whole collection. We will next consider the best bids for a whole sub-collection, such as the Dana collection. We do not plan to sell individual specimens or specimens from a single locality.

### Update on the Above Collection:

Contrary to the hope expressed earlier, my collection is not yet ready for viewing.

Meanwhile, please let me know if there is any further information that I can provide to help you determine your level of interest. We have no overall catalog and, since most specimens (and their labels) are in plastic boxes. It would be very difficult to generate one. For the same reason, a video or Zoom presentation would probably not be too informative. We do plan to update our brochure as soon as our halite specimens have been unpacked.

Please let me know if you are still interested. If so, I will send you a progress report—and hopefully, an invitation to visit—by late September.

Thank you for your patience.

Paul J. Shlichta  
Crystal Research  
9112 Tucker Road SE  
Olympia, WA 98513 USA  
TEL: (360) 459-2455



## More Eye Candy



*Ram's horn malachite Cannington Park*

*Photo Martin F Gale*



*Malachite (spot the azurite too)*

*Cannington Park*

*Photo Richard Bell*

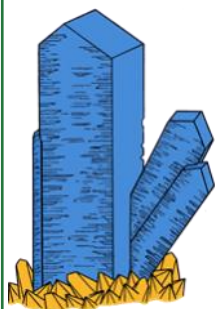
Via British Micromount Society Newsletter, 114, Nov 2021



Please email articles and  
photos to  
[heesacker@coho.net](mailto:heesacker@coho.net)

The next deadline will be December 13, 2023

Interested in a  
wonderful resource for teaching  
children about  
minerals?



Check out the books  
and  
other resources at  
**Diamond Dan Publications.**

<http://www.diamonddanpublications.net/>

## Swarf Systems

Makers of tools for mineral collectors,  
including:

- Rock splitters/trimmers in two sizes
- Microscope lights
- Photography lights 
- Spare parts of all kinds and repairs
- Custom equipment – inquire
- Affordable prices, quality products and service

On the web at:

[www.SwarfSystems.com](http://www.SwarfSystems.com)

## **BREAKING NEWS**

### from Swarf Systems

Hi All,

I am writing to tell you about a cool little attachment I made for my microscope. As you all know, I make microscope illuminators. Well, Jon Gladwell gave me a box of carpathite micros from Cook, WA, and they are a pain to find and see with a microscope because they are tiny. So, I made a dual light illuminator: There are two sets of LEDs: white light and long-wave UV, each with its own power switch. Now, when I put one of the samples from Jon under the microscope, I can zoom in on the fluorescing area, turn on the white light LEDs and see what I am looking at.

If you are interested, I can make illuminators for each of you to fit your microscope (provided it is a microscope model I can fit to). If you go to [SwarfSystems.com](http://SwarfSystems.com) you can see what microscopes I can fit to. If your microscope is not listed, I might still be able to help so don't give up if you want one. Since I have to buy lots of extra components, the cost of the illuminator will be 1.5x that listed on [SwarfSystems.com](http://SwarfSystems.com). If you already have a Swarf Systems illuminator, you will get a discount since I will only make a new circuit board and you will reuse your microscope mount. "Some assembly required."

One limitation is that there is no UV filter for the LW UV LEDs. I have found this not to be a problem since fluorescing minerals will advertise their presence brightly anyway.

If you know anyone else who might be interested, let them know.

Cheers, Ted, Swarf Systems



**www.PNWFM.org**  
**Editor, Beth Heesacker**  
**4145 NW Heesacker Rd.**  
**Forest Grove, OR 97116**  
**heesacker@coho.net**

## **MINERAL MEETING CALENDAR**

### **2023:**

**PNWFM Symposium - October 20-22**  
**Red Lion Inn**  
**510 Kelso Drive**  
**Kelso Washington**

**NW Micro Mineral Study Group - November, Nov. 11**  
**Sons of Norway Columbia Lodge**  
**2400 Grant St,**  
**Vancouver, WA 98660**

### **2024:**

**Pacific Micromineral Conference (MSSC) - TBD**  
**Fallbrook Gem & Mineral Museum**  
**123 W. Alvarado St.,**  
**Fallbrook, California**

**NW Micro Mineral Study Group - May 11**  
**Sons of Norway Columbia Lodge**  
**2400 Grant St,**  
**Vancouver, WA 98660**

**Seattle Mineral Market - TBD**  
**SATURDAY 10:00AM-6:00PM**  
**SUNDAY 11:00AM-5:00PM**  
**The Hangar 30 building at Magnuson Park**  
**7400 Sand Point Way NE, Seattle, WA 98115**

**Northern Mineralogical Association (NCMA) - May 24-26**  
**Eldorado Community Hall**  
**6139 Pleasant Valley Rd.**  
**Eldorado, CA**