

MINERAL G



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October 2023

Pandemic Protocol Relaxed - Come Healthy - Sign In - No Temp Checks - Masks Are Optional



JOIN US FOR THE OCTOBER GENERAL MEETING

On ZOOM — Friday October 6th at 7pm

Causes of Luminescence in Minerals *With Glenn Waychunas*



Dear members and friends of the San Francisco Gem and Mineral Society: Our *First Friday* program for October will feature a talk by Glenn Waychunas, based on a presentation he gave at the 2022 Tucson show titled “*What Causes Fluorescence in Minerals?*” Glenn is a member of the Fluorescence Mineral Society, a scientific affiliate at Lawrence Berkeley National Laboratory (LBNL), and a visiting faculty member at Caltech.

Glenn specializes in mineralogical and solid state spectroscopy, nanoscience, and interface science previously at LBNL and at Stanford University. A collector of fluorescent minerals and crystals for many years, he is now studying luminescent activators in many minerals where they have been incompletely identified and characterized. He has authored more than 180 scientific papers, with about 15 dealing with luminescence.

Glenn is a fellow of the Mineralogical Society of America and he has displayed parts of his large collection at Tucson and at mineral shows on the west coast.

Wherever you are, settle in with a favorite drink or snack and enjoy!

Register in advance for this meeting:

<https://us02web.zoom.us/meeting/register/tZcqfuGvrj8oH9P4WMBjDisvLWJ08ahtzn-u>

NOTE: There's often more detail about club events on our Facebook page: www.facebook.com/SFgem.mineral



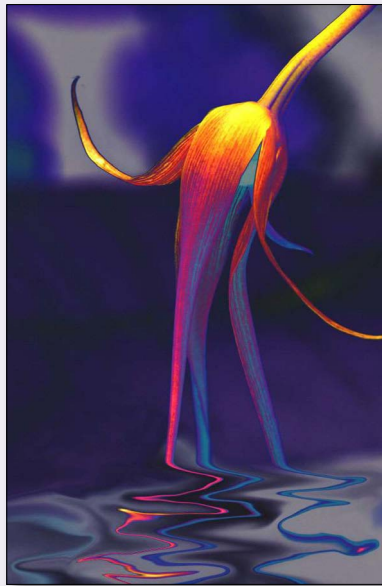
In Memoriam

By Deanna Nielsen
past Mineralog Editor

Mary Lou Froese passed away unexpectedly due to cancer on August 21st at age 81. She leaves behind husband, Larmie, daughter, Merry Lee, who lives nearby, a granddaughter, a three year old great grandson and her son, Eric, living in Arizona along with two grandchildren and four step grandchildren. Also left behind is a 6 1/2+ year old Labradoodle named Jazz (in back) and a 5 1/2+ year old poodle mix named Coco (in front). Both were rescue dogs that quickly became well spoiled and loved members of the family.

An avid rockhound, Mary Lou belonged to several lapidary clubs—the now defunct Daly City Rockhound Club, then the Sequoia Gem & Mineral Society where she was editor of their newsletter prior to her also joining SFGMS. In the 1970's, she attended Skyline College and later received training in etching and enameling at the Palo Alto Art Center Jewelry Studio. Each year, she would enter jewelry in the San Mateo County Fair, usually winning a 1st or 2nd prize.

Having been an editor for the Sequoia Club's newsletter, she knew the value of contributing to our newsletter and starting in August 2019 until August 2023, wrote the monthly "Confessions Of A Rock Addict" for our Mineralog. The articles often featured her own exquisite photos of her jewelry. Wanting to give proper credit to the photographer of a specimens photo she submitted, I was quite surprised to learn it had been a project she completed for her camera club. She not only took the photo but also created all the specimens.



Flower

This was how I discovered that Mary Lou also belonged to a local camera club, and she regularly submitted monthly photos for competition. She had apparently followed in the footsteps of her father, who was a professional photographer.

Many of our members will probably understand her attitude towards making and selling her jewelry. She said, "I take my time in making a piece, which is the reason I don't really sell items. If I do want to sell some things, they usually are



Pacifica Pier

not as complex. Many people don't want to pay much for handcrafted items because they don't know what is involved. I don't want to sell something which is "trending" and I don't want to take an order for something and then the buyer wants to make changes. I do occasionally sell items, such as at the San Mateo Fair's jewelry section, or even to have a table at the two lapidary clubs I belong to."



Salt Flats near SFO

I, for one, will miss seeing her exceptional jewelry and learning the stories about their creation. As Robin Crabill, who proofed her Mineralog articles said, "We will miss Mary Lou's "hands-on" articles about her jewelry projects, and her gentle sense of humor."



Jazz and Coco

A CELEBRATION OF LIFE FOR MARY LOU FROESE

Saturday Oct. 14, 11am • Orange Memorial Park, S. San Francisco • Picnic Area #4

<https://www.yelp.com/biz/orange-memorial-park-south-san-francisco>



Part 158

Masthead by Kevin Anderson

Reclaiming

I usually keep my television set to KQED, so that when I turn it on I won't see one of those disgusting drug commercials that can make anyone into a hypochondriac. I never had "Restless Leg Syndrome" until I saw the ads, but now I have nightmares about my legs moving on their own when I sleep. One night my legs did go crazy and threw me out of bed. I showed up at the club with bruises and a black eye; try to explain that to suspicious people. Well... the other night I turned the TV on and happened upon a show called "America Outdoors with Baratunde Thurston," and saw people digging up lots of big quartz crystals in Arkansas. Yummy.

The scene was beautiful, a forest full of trees and happy people pulling beautiful quartz crystals out of the ground with the equally happy mine owner egging them on. I love quartz; I want to go there.

The show's host Baratunde Thurston (such a name) interviewed the mine owner, who told him that the mine was blessed by indigenous people when he bought the land and was told that he was expected to be a "good steward," which meant "Reclaiming the mine" after it was played out.

He went on to explain that rather than leaving a useless open pit that encouraged erosion, the ground should be stabilized and replanted.

Throughout history, open pit mines have destroyed thousands of acres, but it doesn't have to be that way. A friend of mine went to Butchart Gardens up in British Columbia, Canada, when I was very young, and she brought me a pamphlet with pictures and information. The land was a played out limestone quarry that was "repurposed" in today's parlance into a notable public garden. I looked it up on Wikipedia, yep, that's it, another place I always wanted to visit.

I remember learning about "Hydraulic Mining" in the fourth grade, and my family visited some sites up in the gold country that had been severely damaged by this practice. I like to jump from link to link when I'm reading Wikipedia and I found some fascinating stuff; how hydraulic mining worked, how they got the water pressure up and other amazing techniques used since Roman times for ripping the &#\$@!! out of the land. The worst of it started in California during the Gold Rush. (Good times) Those miners back then didn't much care what damage they did, as long as they got the gold.

Hydraulic Mining was such a threat to the environment that by 1883, San Francisco Bay was estimated to be filling with silt at a rate of one foot per year. Debris, silt, and millions of gallons of water used daily by this practice caused extensive flooding, prompting Sacramento valley farmers to file a lawsuit entitled "Woodruff v. North Bloomfield Mining and Gravel Company," decided in 1884. Since then hydraulic mining has been illegal. I recommend reading about how hydraulic mining was done, as it's really interesting.

Mine Reclamation can be done in many ways for many purposes. End uses may be open space, wildlife habitat, agriculture, or residential and commercial development. Practices that control erosion, stabilization of slopes, and addition of topsoil may be used. And, Reclamation is often phased in while the mine is still being used.

Some Reclamation projects can be quite novel, as long as they're practical, and the Division of Mine Reclamation, part of the California Department of Conservation gives out an award each year for "Excellence in Reclamation." Good idea.

There Is a Word...

By Robin Crabill

Inspired by Mary Sue Bucher's funny, creative article on the rock "Grolite" (Mineralog, Sept. 2023), in which this proofreader was advised to not change one word, it's worth recalling that geology, mineralogy and mining have a trove of odd, sometimes amusing terms. I've been quietly collecting them for years. They take up less space than rocks, though they often reside in... books.

A solid source for such words is A Dictionary of Mining, Mineral, and Related Terms, compiled & ed. by Paul W. Thrush & the United States Bureau of Mines. (Washington: Govt. Printing Office, 1968). Familiarly known as the DMMRT, it was issued as a CD-ROM in 1996. The SFGMS library owns a copy, but this resource has also (probably unofficially) found its way onto the internet.

Some examples:

bleb: A small, usually rounded inclusion of one mineral in another; e.g., blebs of olivine poikilitically enclosed in pyroxene. DMMRT.

clunch: a quarried variety of British chalk (A Land, Jaquetta Hawkes. Beacon Press ed., p. 134)

Stone clunch: English. Very hard underclay (clunch) with interbeds of sand. AGI

diapir: as in Sinking Iron Diapirs: A Model for Planetary Core Formation, by Ruth Ziethe (Logos Verlag Berlin, 2014)

enigmatite: (sorry, it's a mystery you will have to solve yourself)

framboidal: A mineral texture in which pellets form spheroidal aggregates resembling a raspberry. [from French]

grikes: open, criss-crossing cracks in 'pavement'; dissolved in limestone by rainwater. DMMRT: Joint fractures in limestone, widened by solution.

grus: a clastic sediment composed of hard, often abrasive granules of a size range between sand and pebbles, typically from exfoliation of bedrock (typically granite)." (Wikipedia)

moonmilk: (in caves) a microcrystalline to nanocrystalline coagulation of disordered acicular individuals, porous and plastic in nature, and containing 40-80% water by weight. Moonmilk may be of biogenic origin, chemogenic origin, a residual precipitate of bedrock or speleothem weathering, or of mixed origin (Hill & Forti 1997).

regmaglypts: (astronomy, geology) A small, shallow indentation or pit on the surface of a meteorite, resembling a thumbprint impression in clay, created by ablation while falling in an atmosphere...from Ancient Greek ρήγμα (rhêgma, "a breakage, fracture, rupture, ruin, something torn"), and Ancient Greek γλυπτόν (gluptón, "a carving, sculpture") (Wiktionary.org). See also: <https://www.aerolite.org>.

Schlangengips: massive gypsum with snake-like squiggles in a contrasting color; reminiscent of patterns in some Covelo jade. (Schlange: snake, German) <https://www.mineralienatlas.de/lexikon>

slumps: see "Slow-sliding slumps, Grand Mesa, Colorado," by Yeend. (The Mountain Geologist 10(1): 1973: 32pp.)

Sorry, I'm skipping scarp, scree, skarn and even siliceous sinter, only to settle (in closing) upon swarf, something lapidaries should pay attention to:

swarf: defined as "fine metallic filings or shavings removed by a cutting tool" and can therefor refer to that milky liquid you get when you cut cabochons or facet stones. Although it appears to be harmless, swarf can be deadly to your plumbing system and lapidary equipment if not handled properly." (— from Gem Cutters News, 11/84, via BEMS Tumbler 12/2009; reprinted in Marin Mineral Society Tumbler, Jan-Mar 2010)

(One More) Confession of a Rock Addict

Using PNP Paper for Etching

By Mary Lou Froese

Editor's Note: This short article is from "how-to" correspondence between Deanna Nielsen and Mary Lou Froese, prior to her passing.

What is PNP paper used for in etching? To illustrate the etching technique, one of the more versatile resists, a type of blue acetate film known as PnP ("press 'n' peel") paper, will be used. One side of this paper is shiny and the other is matte. It is the matte side that is used to transfer a pattern onto the metal.

Clean & scrub your metal, whether sterling, copper, brass or nickel silver. Print the image(s) onto PNP paper which Oliver Juang from the Palo Alto Art Center supplies. Cut your image from the PNP paper and tape it matte side down to the metal piece you have cut out with removable tape. Iron the PNP tape onto the metal. Remove the PNP paper and fill in anything not transferred to the metal with an ultra fine Sharpie, or remove unwanted items with an X-Acto knife.

Use Sharpie "Paint" pens to blacken the edges so they don't react to the etching chemical. The metals with the transferred image go into the chemicals upside down and taped on plastic rods and sealed cigarette boxes Oliver has constructed to hold the metals. Sterling takes one type of chemical, and takes about 4 hours to etch. The other metals go into a different chemical bath and may etch in 2-1/2 to 3 hours. Oliver lays out the chemicals and puts a vibrator on the table to agitate the chemicals.

Once the image is done, you remove it from the carrier and scrub the image with a wire brush under water. Usually, the chemicals are good for two times. Then you would cut away the edges, file the piece and proceed with a bezel if wanted and further enhancements such as oxidation, jump rings, bails, etc.

The only hitch to this is that in order to attend the etching class, you have to have attended one or two fabrication classes in PA. Then, you have access to the studio and any other classes which are scheduled. There are fees for a monthly pass or just one day which is what I do. Oliver sets up an etching about every month.

ANNOUNCING A NEW COURSE AT THE CLUBHOUSE

"Making Every Day Wearable Jewelry"

Instructors: *Nakish and Mary Sue Butcher*

Register in-person at the Clubhouse with Nakish and Mary Sue Butcher on Saturday October 14, 2023
From 12 Noon to 3 pm.

Class is scheduled for Saturday October 21, 2023
From 12 Noon to 3 pm. Classes opened to all.
\$10 per session.

For information please contact Mary Sue:
midnight.cloud@hotmail.com

Class Objective: Teach students to design and create professional quality everyday wearable jewelry. By the end of the course the student will be able to design and create earrings, necklaces, bracelets and pendants with readily available components. No soldering or stone setting required.

Description: The course comprises 4 sections: Earrings, Necklaces, Bracelets and Pendants. At the beginning of each section the class will begin by drafting on paper the design of the piece of jewelry and discussion on how to execute. The rest of the section will focus on construction techniques and quality control. By the end of the course, students will have their own set of jewelry, ready for wearing.

Please See Required Tools & Supplies List:

https://docs.google.com/document/d/1rFm0oRibhSm7Gi_5dOx5KLejmKDBwZrp/edit?usp=drive_link&ouid=117025983989451263484&rtfpof=true&sd=true

From Instructor, Nakish:

"I started cutting stones in my twenties with the Daly City Rock Hounds, which no longer exists, before coming to the San Francisco Gem and Mineral Society in 1990.

I am in the Theatrical Wardrobe Union of the International Alliance of Theatrical State Employees, Moving Picture Technicians and Artists and Allied Crafts of the United States and Territories and Canada. Since 1986 my specialty in wardrobe has been as a teacher in millinery, beading and jewelry.

I have two fashion degrees and I am a former dance instructor. Born here in San Francisco.

Come and let's make jewelry together!"

WEEKLY SCHEDULE

**** PLEASE be sure to call the clubhouse (415-564-4230) before traveling ****

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10 AM - 3 PM Lapidary, Silversmithing	10 AM - 1 PM Lapidary	9 AM - 10 PM Lapidary, Silversmithing, Spheremaking	9 AM - Noon Lapidary	9 AM - Noon Lapidary, Silversmithing	10 AM - 5 PM Lapidary	10 AM - 5 PM Lapidary, Silversmithing, Spheremaking
	7 PM - 10 PM Lapidary	7 PM - 10 PM Lapidary	6 PM - 9 PM Lapidary, Faceting	6 PM - 9 PM Gem Carving		

SPECIAL DATES IN OCTOBER

-  **October 6, Friday • 7:00 pm**
General Meeting on Zoom

-  **October 8, Sunday • 11:00 am**
Instructors Meeting In-Person at The Club
**Zoom option - Info: tonythetm@aol.com*

-  **October 14, Saturday • 8:30 am (special time)**
Board Meeting on Zoom
**Zoom Meeting - Info: tonythetm@aol.com*

-  **October 17, Tuesday • 5:00 pm**
Mineralog November Submission Deadline

-  **October 29, Sunday • 10:00 am - 3:00 pm**
*SF Gem and Mineral Society Fair
and "Spooky" Open House*

UPCOMING SHOWS & EVENTS

- Oct. 7-8 - Walnut Creek, CA**
Contra Costa Crystal Fair
Civic Park Community Center, 1375 Civic Dr., Walnut Creek
Sat 10-6, Sun 10-4 • <https://www.crystalfair.com/crystal-fair-shows>
- Oct. 14-15, 2023 – Redwood City, CA**
Peninsula Gem & Geology Soc. and Sequoia Gem & Mineral Soc.
Redwood City Community Activities Building, 1400 Rosevelt Ave.,
Redwood City, CA 94061
Hours: 10 AM – 5 PM
Contact: (650) 575-3144, cci@pacbell.net
<https://www.sequoiagemandmineralsociety.org>
- Oct. 21-22, 2023 – Santa Rosa, CA**
Santa Rosa Mineral & Gem Soc.
Santa Rosa Veterans Memorial Bldg., 1351 Maple Ave., Santa Rosa, CA 95404
Sat & Sun 10 AM – 5 PM
(707) 849-9551, jolene4srmgs@gmail.com • <https://www.srmgs.org>
- Nov. 4-5, 2023 – Concord, CA**
Contra Costa Mineral & Gem Soc.
Centre Concord, 5298 Clayton Road, Concord, CA 94521
Sat 10 – 5, Sun 10 – 4
mike@diaborocks.com
<https://www.facebook.com/groups/CCMGS>



BIRTHDAYS IN OCTOBER

Jennifer Kopatz
William Ajoy
Rick Ghigliazza
Elizabeth Price
Ruth Ann Ryan
Mary Lou Froese
Peter J. Borodin
Yaffa Meiners
Youhua Yang
Lena Lazareva
Dana Michele
Brinkley-Gaylord
Maurizio Damiani
Stephan Salazar
Christina Taylor
Karin Martz
Hannah Bouchard
Jake Horwath
Yuan Guang Zheng
Annie Erwin
Ashoka Finley
Tinnee Lee
Donald Simpson
Kim Vick

Julie Martin
Kurt Schwartz
William Alschuler
Tiffany Chan
Theo Duke
Rand Stadtman
Charles Jenkins
Mie Imamura
Nancy Kurtz
Ben Hansell
Tessa McGarvey
Shannon Devine
Gennadiy Litovskiy
Barbara Matz
Jay Bates
Patricia Spencer
Heather Galloway
Eva McKay
Lisa Lockhart
Chris Osborne
Jeanine Svahlin
Harold Tuchfeld
Bill Kaplow

NEW MEMBERS FROM SEPTEMBER

A warm welcome to the following new members!



*Lauren Payne
Erin Donnelly
Kang-Min Chang (Maurice)
Mike Del Bong
James W. Kennedy*



To add, update or change a calendar event,
please contact mineralog@protonmail.com

2023 BOARD OF DIRECTORS AND COMMITTEE CHAIRPERSONS

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<i>Entertainment Director</i>	Mary Sue Bucher	midnight.cloud@hotmail.com	510-528-3136
<i>Librarian</i>	Mariana Photiou	parathiraki@gmail.com	415-712-2997



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THE MINERALOG

We are always grateful for editorial and photographic submissions, especially from our members.

To contribute content, submit story or calendar additions, updates or corrections, please email the Editor: mineralog@protonmail.com

Deadline for **November** Mineralog is 5:00 PM **Tuesday, Oct 17**

Any submissions or changes received after the deadline will automatically be included in the following month's Mineralog.

Original material published in the Mineralog that is not copyrighted may be reprinted with all due and proper credits.

For Membership Info, contact the Membership Secretary: tonythetm@aol.com

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Membership Activities Include:

Earth Sciences, Lapidary, Field Trips, Collecting, Jewelry Making, Shows

An Educational Non-Profit Organization Founded in 1935

Member, California Federation of Mineralogical Societies and American Federation of Mineralogical Societies