

Summit Gem January 2017

Summit Lapidary Club, 244 Chestnut Blvd., Cuyahoga Falls, Ohio 44221
Phone 330-929-3798

Board Members: Pres. – Andy Carey, V-President – David Frazier,
Treasurer – John Kerr & Laura Thomas, Secretary – Laurie McElroy, Trustees – Tom
McLaughlin, John Tryon, Frank Mack and David Rich
Newsletter Editor – Pat Powers 440-237-6170 SLCnewsletter@AOL.com or mail to 18270
Buccaneer, North Royalton, Ohio 44133
Website: SummitLapidaryClub.com

Mission Statement

To afford the opportunity to share interest in lapidary knowledge and working techniques



Monthly Meeting: Tuesday, January 3rd at 7PM
At The Quirk Center
1201 Grant Street Cuyahoga Falls



Program: Multi-Facet Productions – Color Changing Gemstones

Dues: Joining fee \$25 then \$48 per year

President's Message – by Andy Carey

Hello Everyone!

Wow! What a month! Many thanks to Mary Ann and David Rich for hosting our Christmas party. Great food and great fun with awesome people. Thank you. I hope everyone had a great holiday and a wonderful New Year. This month we will be meeting at Quirk. Hope to see you there. No host for this meeting, bring something to share if you would like.

Thanks, Andy Carey

Summit Lapidary Club, December 6th 2016 General Meeting - Respectfully submitted by Laura McElroy, Secretary SLC

Andy Carey presided

Thank you to all who brought Christmas cookies, and to Sue Shoffner & JoAnn Harrison for set-up.

Visitors, Dave Macseoinin: None

Classes, Dave Macseoinin: Aunt Laura's Earring Extravaganza 12/13

Treasurer, John Kerr: Dues coming in. \$44 until after January general meeting. After 1/1 dues are regular price of \$48. This month's expenses include the new computer, Big Dig, saw oil, and New Member Dinner.

Sunshine, Mari Takai-Manley: Dawn Carey's foot surgery is not healing well; she had an MRI & is having rehab. Carolyn Dumke sprained her ankle. New member, Lillian DeFrance has cancer. Sandy Shorter had surgery. Jim Wanger's wife, Robin, lost her father. Laurie McElroy got a new grandson.

Library, Mari Takai-Manley: Purchased a book recommended by Jim Watson on Metalsmithing- a jeweler's bible, Metal Techniques for Craftsmen.

New Librarian, Doug Shorter, requests suggestions of things to add to our library, some of which is on the new computer now.

Newsletter, Bob Powers for Pat Powers: Extra copies available.

Gemboree, Bob Powers: Tom McLaughlin has finalized the financial reports and the profit splits have been figured. We have enough materials for the next Gemboree Silent Auction & Geode Cracking, accounting for some of the extra costs. Tom McLaughlin is training Laurie McElroy to be his replacement as Gemboree Treasurer. Ten dealers are already paid for the Fall Show.

GeoJrs, Evelyn Tryon: Thank you to everyone who has helped with the GeoJrs Program this year: field trips, classes, crafts, rock & mineral ID- you are all invited to their Christmas pizza & awards party Sunday. Mari Takai-Manley will be teaching a class with bread clay. Please, all plan to help in 2017

Machine Maintenance, David Moore: All working

Property Maintenance, Frank Mack: All up-to-date.

Old Business:

Arts & Crafts Fair, Laura Thomas: It looked good. We need more customers. Trying a different date next November, only 2 weeks after Gemboree.

JoAnn Harrison: Tonight is officer elections. Please consider giving back to the club by being involved in some capacity.

"Great Job" to John Hite, Jen Fike & Michelle on the fantastic tree they submitted to the Children's Hospital Treefest on our behalf.

Christmas Party, Maryann Rich: This Saturday. Bring gifts for "the Game".

New Business:

Thank you to Sue Shoffner for watering & weeding our Adopt-a-Spot garden at the Natatorium. We will support Adopt-a-Spot again in 2017.

Sue Shoffner has agreed to be our new Supply Officer, buying supplies for meetings & paper goods for the club house.

Frank Mack has agreed to stay on as Property Maintenance for 2017.

Proposed by-laws change , Article 5 Section 4 on dues, was read.

Elections Slate:

President: Andy Carey by Joe Spohn, KathiJo Lappin 2nd
Dave Rich by John Hite, Enzo Pendolino 2nd, declined
Mary Ann Rich by David Macseoinin, David Moore 2nd

Vice President: David Frazier by Joe Spohn, Jim Watson 2nd

David Rich by Jim Watson, Frank Mack 2nd

Doug Shorter by Joe Spohn, Tom McLaughlin 2nd

Treasurer: John Kerr by Frank Mack, KathiJo Lappin 2nd

Laura Thomas as co-Treasurer by JoAnn Harrison, Frank Mack 2nd

Secretary: Laurie McElroy by KathiJo Lappin, Frank Mack 2nd

Trustee, 2 yr.term: Dave Rich by Caitlin Pendolino, Joe Spohn 2nd
Guy Kotch by Evelyn Tryon, John Tryon 2nd
Frank Mack by JoAnn Harrison, Tom McLaughlin 2nd
Mike Knapp by Sandy Shorter, David Frazier 2nd

Thank you to the counters, JoAnn Harrison, Joe Spohn, & John Hite.

Thank you to all who ran for office.

Your Officers for 2017 are President Andy Carey, Vice President David Frazier, Treasurers John Kerr & Laura Thomas, & Secretary Laurie McElroy. Trustee David Rich.

Motion to adjourn by David Rich, Joe Spohn 2nd

Program For January Meeting – By David Frazier

Stan Molenda and his wife, owners of Multi-Facet Productions, will present information regarding color changing gemstones specifically alexandrite. Their shop is located in Ashtabula, Ohio where they fabricate pieces and do stone setting. Multi-Facet Productions are a familiar dealer for our Gemboree.

Classes and Events for January– (more details regarding classes and events posted at the clubhouse)

- | | |
|-----------------|-----------------------|
| 01/07, Saturday | Polymer Clay Advanced |
| 01/25 Wednesday | Begin Wirewrap |
| 01/29 Sunday | Begin Silversmithing |

Just a Word About Classes! – by Dave Macseoinin

Of course to be up to date with classes, you as a member must be regular to the coffee klatch Tuesdays and Saturdays. Look at the class schedule board above the coffee maker.

When you sign up for a class, please note the requirements for the class.

If you are not able to attend the class, be respectful of the instructor and phone in time for an alternate to attend.

If there is plenty of interest in any said class, it will be repeated in due time.

If you did not sign up for a class, do not just show up to listen. This is rude to the instructor and the attending class.

All of our instructors are club members that graciously volunteer their time to teach. Respect that with gladness for in time you will be a teacher!

Now the last word: Never fuss over anything about our classes. Try pricing the cost of these classes elsewhere and you will see the benefit of our club. The classes may take some time to be scheduled but for \$48 a year plus comradery. It's a bargain!

New Website – by Bob Powers

At the December meeting, a Website committee was commissioned to look into an updated website for the Summit Lapidary Club. The committee is comprised of Andy Carey, Guy Kotch, Tom McLaughlin, Bob Powers and Sandy

Shorter. Several approaches were considered, and a committee meeting was held on December 20th. At the December Executive Board meeting, the committee recommended to 1. Acquire the domain name "SummitLapidaryClub.org" or something similar for the club, and 2. Construct a website that is owned and maintained by Club members. An easy-to-use website builder that requires no HTML, CSS or Java scripting was recommended.

The Executive Board approved this motion, and immediately after the meeting obtained the domain name "SummitLapidaryClub.com" and website through GoDaddy.com. (Some unnamed person obtained the website name "SummitLapidaryClub.org" just prior to the meeting).

Cost of the website for three years through GoDaddy was around \$ 330. The website has up to 10 GB of data for text and images and an unlimited number of web pages. It is viewable across viewing platforms, from desktop computers to a variety of cell phones and web browsers.

Upcoming activities for the committee are to select and then populate a website template with text, images and links in order to make this a fully functioning website. The new website name will be sent to the MWF in January along with the 2017 dues, and will be published in the MWF newsletter and on-line information. This will make contacting the Summit Lapidary Club much easier for people in the future. Please provide your suggestions for making this a great website to any of the Website committee members.

Hammered - by Paulette Moore

On Tuesday night, November 8, 2016, several members met to make hammered metal bracelets led by our talented Laura Thomas. The meeting room sounded like Santa's Workshop as we hammered designs into copper and brass washers. Some punched holes into the washers and joined them with jump rings. Others joined the washers with jump rings alone. Some mixed the metals and designs, while others utilized one metal and design. In all, it was a fun and therapeutic activity for Election Night.

Metalsmithing Competition 2017

Open to all members of Summit Lapidary Club only. Rules and guidelines for competition:

- Use all elements of design. Workmanship will be graded so be neat.
- Use any metal you wish. For example silver, gold, copper, brass or bronze.
- This is for fabrication only. (no metal clay, wirewrap or castings)

Novice level: Open to all members of 3 years of membership or less. Each piece must have at least one stone cut by entrant. No more than 3 pieces per entrant.

Advanced level: open to all members over 3 years of membership. Work must have 2 or more stones with one stone to be cut by entrant. No more than 3 pieces per entrant.

All entries must be received by Dave Macseoinin no later than November Board meeting (that's the last Tuesday of November.)

Prizes will be awarded at the December membership meeting. Value of awards TBA.

Proposed Changes to the Summit Lapidary Club Rules and Regulations/By Laws – by Doug Shorter

Summit Lapidary Club by-laws Article V: Dues, section 4.

Change from: "Any member removed from the roll for reason of delinquent dues may reapply for membership. Said member shall be assessed the amount of the delinquent dues or \$ 25.00, whichever is the lesser amount."

To: Any member removed from the roll for reason of delinquent dues may reapply for membership. Said member shall be assessed the new member initiation fee in addition to the annual dues." Thank you for your consideration of this change.

Faceting Information – by Ron Maitland

As a newbie faceter I practice by making earrings for the eight women in my family. My choice of material is lab grown sapphire.



On my first attempt I expected to match colors by cutting a cross section from a boule, cutting it in half, and using the adjacent tips for pavilions. Unfortunately the finished pair did not match. One was darker than the other as seen by the unaided eye.

I repeated the exercise with the same result. Tip of pavilion to tip of pavilion did not match. However, the gems next to each other did! Since then I have produced matching gems by slicing down the length of the boule, cross cutting to get a quarter cylinder, cutting that into side-by-side wedges, and faceting them.

The picture shows the boule, a work in process, and the matching wedge. The two pieces came from the same side and are in their original locations before cutting. All I have to do now is cut down on the waste.

Sunshine News – by Mari Takai-Manley

- Sandy Shorter completed her series of chemotherapy. She feels better and strong and is officially in remission. Congratulations Sandy!
- Bob Spore's mother, Kathryn, passed away in Ashland on December 14 at the age of 89. She is now united with her husband George, who died Oct. 16, 2010. We send our deepest sympathy to Bob and his family.
- Jacqueline "Jackie" Dionne, 78, of Kent, died Tuesday, December 6, 2016 at her home. She is now united with her husband Armand, who died Sep. 20, 2016. We send our deepest sympathy to their four children.
- Merry Anne McLeod-Wolfe completed her third and final surgery (on her lower back) this year. Even though she is still sore, she is at home recovering and is in good spirits. We wish her a speedy recovery.

An Introduction to Synthetic Gem Materials - By Robert Weldon <https://www.gia.edu/gem-synthetic>

A synthetic gem material is one that is made in a laboratory, but which shares virtually all chemical, optical, and physical characteristics of its natural mineral counterpart, though in some cases, namely synthetic turquoise and synthetic opal, additional compounds can be present.

Synthetic gem crystals have been manufactured since the late 1800s, and their production is often marked by a need for them in industrial applications outside of the jewelry industry. The first success was in producing synthetic ruby of faceting quality. Synthetic crystals are used in communications and laser technology, microelectronics, and abrasives. Because synthetics for jewelry applications can be "made to order" [i.e. consistent color and crystal shape] given the right ingredients, time, and the facilities to grow them, they are likely to be much less rare than natural gems of equal size, clarity, and saturation of color. Because of this, and because it is possible to confuse them with gems that are naturally occurring, there are strict guidelines regarding how they are marketed and sold.

In the United States, the Federal Trade Commission requires that any gem material produced in a laboratory be described in a way that leaves no doubt that it was not produced naturally. It is considered to be a deceptive practice if a synthetic gem material's origin is not clearly disclosed throughout the distribution channel at the time of sale, from the manufacturer to the consumer. There are also a number of industry organizations such as the American Gem Trade Association (AGTA), the International Colored Gemstone Association (ICA), and the World Jewelry Confederation (CIBJO) that have formulated specific guidelines for their members regarding the disclosure of synthetic gems at the time of sale.

In the last decade fewer new kinds of man-made gem materials have been marketed. This suggests that the repertoire of synthetic gem materials is close to reaching its limit in terms of the creation of new materials, but it is not limited in production which is still very significant. During the last century, researchers have developed a number of different ways to create these synthetic gem materials in the laboratory. Most of these methods fall into two major categories – melt or solution.

In melt processes, the chemical composition of melt is the same as the composition of the resulting crystal. In solution processes, the solution or melt has a different chemical composition than that of the resulting crystal. Constituents are dissolved in the solution or melt at high temperature, and the crystal forms initially on a seed crystal as the melt temperature is lowered. Some of the main synthetic processes include:

Flame Fusion or Verneuil process (melt process)

The first commercially successful synthetic gems were created by the flame fusion process. This process involves dropping powdered chemicals through a high-temperature flame, where it melts and falls onto a rotating pedestal to produce a synthetic crystal. Today it remains the least expensive and most common way to make gems such as synthetic corundum and spinel.

Crystal Pulling or Czochralski process (melt process): Pulling emerged in the early 1900s. In this process, nutrients are melted in a crucible and the synthetic crystal grows from a seed that is dipped into the melt, and then slowly pulled away from the melt as it grows. Gems synthesized by pulling include synthetic alexandrite, chrysoberyl, corundum, and garnet.

Flux growth (solution process): Today some synthetic gems, such as emerald, ruby, sapphire, alexandrite, and spinel can be created through a flux-growth process. Flux is a solid material that, when melted, dissolves other materials in the same way that water dissolves sugar. As the dissolved chemical solution gradually cools, synthetic crystals form.

Growing a synthetic gem by the flux method requires patience and significant investment. Crystal growth can take up to a year, and the equipment is very expensive. But the results, especially when it comes to emerald, are well worth the time and effort.

Hydrothermal growth (solution process): Like the flux process, the hydrothermal growth process is slow and expensive. But it's the only method for successfully growing synthetic quartz. This process requires heat and pressure and imitates the conditions deep in the earth that result in the formation of natural gems. Nutrients are dissolved in a water solution, and then synthetic crystals form as the solution cools.

While the following list encompasses the commonly seen synthetics, over the years there have also been experimental synthetic gems. These include malachite, color change synthetic spinel and others. But because nature produces these products more readily, they are not often seen today. Some of the synthetic gems that are more frequently encountered include:

Synthetic diamond (this is not frequently encountered) These diamonds, grown in a laboratory, share most of the characteristics of their natural counterparts: they are essentially carbon.

Chemical vapor deposition (CVD) – diamond growth in a vacuum chamber due to a chemical reaction which releases carbon atoms that precipitate on diamond seed plates.

Just a Quick Note... – by Pat Powers

- Our joint Christmas Party with the Akron Mineral Society was hosted by Mary Ann Ferguson Rich at the Akron Women's Club last month. The party was well attended and enjoyed by all. As always the food was excellent and the "game" was exciting. Many thanks to Dave and Mary Ann!
- Reminder membership dues are due - \$44 if paid at the January meeting, after the meeting \$48.
- Be aware if there is a snow ban listed for Cuyahoga Falls on meeting night the current meeting is cancelled and automatically rescheduled for the following Tuesday. Check with the Cuyahoga Falls PD for weather conditions before you head out. 330-928-2181.

Nothing more to add. Bye and see you next month!