

# Rockgrinders Gazette



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## Club rooms opening hours

Monday	9am till 2pm
Wednesday	9am till 2pm
Friday	6pm till 9pm
Saturday	9am till 1pm

January 2015 Garnet Edition

## New members welcome

Interested in: Lapidary, Fossils, Gems, Crystals, Beading, Silversmithing or Lost wax casting in a relaxed friendly environment? Pop in and have a chat.

To all new members, we trust you will enjoy your experiences with us and benefit from our classes. If you have any questions there is a duty officer who will assist you. All members would also love to help you if they can.

### Membership

Single	\$15.00
Family	\$20.00
Pensioner Family	\$15.00
Pensioner / Student	\$10.00
Insurance	\$4.50 per member
Workshop fees	\$2.00

**NOTE:** You must be an insured member over 12 years of age to use machinery & cutting implements

All visitors are welcome however only members can use machines or gas.

Due to an increase in our insurance charged by the G&L council broker, our personal insurance paid by members has increased from \$3.50 to \$4.50 this year.

## Silver Classes

Silver Casting Classes are conducted Friday evenings. Barry and Dorothy will be glad to help you get started. Our final silver class for the year is on the 19th December and we resume classes on Friday 16th January.

## Open Day 2014

The first Open Day will be on 7th March 2015.

## January Workshop

We will be exploring the possibilities of the rolling mill. Make a bracelet or a pendant using the rolling mill. If you have any texturing material, bring it along. Lace, cloth, cardboard cutouts all work very well to create a texture on copper.

**Cost \$10**

9.30am

Saturday 24th

January



## The Grinding Wheels

As you may be aware, the damaged grinding wheel has been replaced. This wheel should have lasted at least another year. The wheel cost about \$300 to replace. This was an expense we should not have needed to pay this year.

When you use a grinding wheel, you must make sure you move evenly from side to side. If you do this, the wheel will wear evenly and will last for many years. Once someone, through sheer selfishness (or laziness) has started to wear a groove in the wheel, it becomes very hard for other users to use the wheel correctly.

If a club member is seen to be repeatedly using the wheel incorrectly, they will no longer be allowed to use the grinding wheels. If you are not sure that you are using the wheel correctly, ask the duty officer, they are only too happy to help.

## Christmas Party

Thank you to everyone who helped out with the Christmas party. It was wonderful to see so many people working together to make a really enjoyable night.

## Brad Smith's Bench Tips

### SILVER DISCOLORATION

Working with jewellery involves an ever increasing number of skills. Chemistry is one of them that comes into play when dealing with a discoloration on the metal caused by a chemical reaction between it and the environment. In the case of Sterling silver there are three discolorations we typically encounter: a tarnish, a firescale, and a firestain. Each is different in its cause, in its cure and in its prevention. All three have to do with the metals in the Sterling alloy (92.5% silver and 7.5% copper) and how they react with oxygen and the heat of soldering or with pollutants in the air over the long term.

Tarnish is a grayish coating that builds up slowly on the surface as a result of a reaction of the silver with sulfur-based compounds in the air. Typically these are pollutants from the burning of petroleum fuels, but they can come from other sources as well. I once tarnished all the silver in my display case by putting a pretty specimen of iron pyrite in with the jewelry. Turns out pyrite has sulfur in it! Sulfur combines with the silver to form a grayish silver sulfide film on the surface. Preventing tarnish involves keeping sulfur away from the metal. Plastic bags will help, and anti-tarnish strips are available from jewelry supply companies to pack near your items. Tarnish is easily removed by hand polishing with a jeweler's cloth or with one of the products sold for cleaning the good silverware for holiday dinner.

Another way is to remove it chemically. Put a piece of aluminum in the bottom of a dish large enough to contain your piece. Heat enough water to cover the silver. Mix in 2 tablespoons of sodium carbonate per cup of water and pour into the dish. Be sure the silver touches the aluminum. Sodium carbonate is the main ingredient in washing soda. Read the labels in grocery and hardware stores.

The second type of tarnish is called firescale. It is the dark gray to charcoal colored film that forms on Sterling or other copper alloy like copper or bronze when we heat it with a torch. The copper in the alloy reacts with oxygen in the air to form a dark cupric oxide coating on the surface. Luckily, the oxide is easily removed by dissolving it in a mild acid - generally called a pickle. It's important that we not let firescale form on a solder joint because it will block the flow solder over the joint.

Prevention can be done two ways. Most common is to use a flux, a borax-based solution applied to the metal before soldering. When melted, borax forms a thin glassy layer that keeps oxygen away from the metal. A second way is to do your soldering on a charcoal block. Together with the flame, charcoal greatly reduces the amount of oxygen in the area being soldered. In either case oxygen is prevented from reaching the metal, so no cupric oxide firescale is formed. A second oxide can also be formed when soldering copper or a high copper content alloy like bronze or brass. It's called cuprous oxide and is reddish in color. That's why a black looking piece you put in the pickle sometimes comes out red. Problem is that while the black cupric oxide is dissolved by a pickle, the red cuprous oxide is not. The discoloration can be sanded or polished off, but an easier way is to use a "super pickle". This is a mixture of fresh pickle with a healthy shot of hydrogen peroxide from the local store.

I've saved the worst form of discoloration, firestain, for last. Think of firescale (above) as like getting dirt on your shirt that you have to wash off. Firestain is like getting ink on it. The discoloration is not just on the surface, it seeps down and stains the material. Firestain happens when we heat a piece of silver too hot, too long, and/or too many times.

Firestain occurs when the oxides start to build up below the surface of the metal. You generally don't notice it until after polishing. It appears as a darker area of the surface and is easy to spot when viewed under light bounced off a piece of white paper. Because firestain is below the surface, there's no easy bench tip solution. Depletion gilding may work for some pieces. Otherwise, removing it calls for sandpaper and aggressive polishing.

A much better approach for a piece that will require a large number of solderings is to protect the metal from developing firestain by applying liberal coats of a firecoat. Regular soldering flux will provide some protection but will not be as effective as preparations made specifically for the task.

*Get all 101 of Brad's bench tips in "Bench Tips for Jewelry Making" on Amazon*

You can also look online at his book at <http://amazon.com/dp/0988285800/>  
*Campbelltown Lapidary Club – January Garnet Edition 2015*

## Rose Quartz

The Traditional birth stone for January is Garnet, but one of the alternate birthstones is Rose Quartz.

Rose Quartz is a fairly common semi precious gemstone and can be found in quite large pieces. Rose quartz is found in Madagascar, India, Germany, and several localities in the USA. Much rose quartz was extracted from a famous site near Custer, South Dakota, but now, most of the world's supply of good quality rose quartz comes from Brazil. Brazil is the only country where Rose Quartz crystals are regularly found.

Rose Quartz is often cloudy and therefore is not a stone commonly used for faceting. It is more commonly carved, cabbed or tumbled. However, if you get a flawless piece of Rose Quartz it does make a beautiful faceted stone. If Rutile needles are present, when polished it displays an asterism, in the form of a six-rayed star. This star can be best seen by looking through the Rose Quartz as opposed to shining a light on it as is the case of most asterism gemstones.

Some of the better samples can be almost rose red and some African varieties are almost lavender. The colour is thought to be caused by iron and titanium impurities. However the colour of rose quartz is still not completely understood. It has been said to be due to a number of different minor impurities present in the rose quartz including titanium, manganese and even colloidal gold.

### Physical Properties:

Chemistry: **SiO<sub>2</sub>**

Composition: **Silicon Dioxide**

Class: **tectosilicate**

Crystal System: **Hexagonal-Rhombohedral**

Fracture: **conchoidal**

Hardness: 7

Specific Gravity: **2.65**

Refractive Index: **1.544-1.553**

Pleochroism: **weak to distinct**

Luster: vitreous

Streak: **white**

Color: **various shades of pink to a rosy-red**

Cleavage: **none**

Transparency: **Usually opaque to translucent, sometimes transparent**

Associated Minerals: Quartz is found with many other minerals

*Data from [http://minerals-n-more.com/Rose\\_Quartz\\_Info.html](http://minerals-n-more.com/Rose_Quartz_Info.html)*



Rose Quartz showing an asterism

### January Birthdays Garnet

Linda McCulloch	Betty Thompson
Cecilia Grieshammer	Eileen Golian
Ron Bryant	Don Jones
Greg Thompson	Tristan Jones

### Spiritual Properties

The keyword for Rose Quartz is 'unconditional love'.

Rose quartz is known as the love stone. It helps the user feel a strong sense of self-worth, therefore being worth love. Rose quartz is the stone of universal love. It is also the stone of love in marriage. When worn in jewellery the wearer feels a sense of self-worth.

Rose Quartz has a gentle vibration of love for the owner. It gives inner peace and helps in all matters pertaining to love in all its forms. Rose Quartz opens the heart to love. It also helps as a rejuvenator to the skin



## What's On

Events are generally from the Gem and Lapidary Council of NSW

<http://www.gemlapidarycouncilnsw.org.au/events.html>

Other contributions can be made via email to the club [ctownlapidaryclub@bigpond.com](mailto:ctownlapidaryclub@bigpond.com).

We are grateful for any submissions

WHEN	WHAT	WHERE
14th – 15th February 2015	<b>Orange Lapidary and Mineral Club Inc. 50th Anniversary celebrations</b> The event will showcase all our efforts over the years and will focus on "Mining and Prospecting in Orange & surrounding districts". We also hope to have exhibitions from Cadia Mines, The Historical Society and also The Age of Fishes.	Senior Citizens Building Kite Street, Orange
1/3/15	<b>Rock Swap – Stuart Park Wollongong – Illawarra Lapidary Club</b> members and tailgaters selling anything from lapidary items including rough, slabs to finished cut cabochons, faceted stones and finished items of silver and even gold jewellery. A rock scramble for children is at 11a.m. Noon and 1p.m.	Stuart Park Wollongong. The rock swap starts at 8.30 a.m through to 2.30 p.m
7/3/15	<b>Campbelltown Districts Lapidary Club Open Day</b> Rough, opals, specimens, jewellery, sausage sizzle	Lot 1 Bensley Rd Macquarie Fields
21st – 22nd March 2015	<b>Canberra Lapidary Club Rock Swap</b> 8.30am to 5.00pm Fossickers & dealers, Crystals, minerals, rough & cut gemstones, opals, fossils, jewellery. Food available Sieve for sapphires	Wagtail Way, EPIC (Exhibition Park in Canberra) More info <a href="http://www.canberralapidary.org.au">www.canberralapidary.org.au</a>
21st and 22nd March 2015	<b>24th Annual Gem And Craft Show, New England Lapidary &amp; Fossicking Club inc.</b> 9 am – 5 pm 22nd March 9 am – 3 pm free entry. See a spectacular array of gems, rocks, crystals, jewellery, gifts, craft, beads and lapidary books/supplies/equipment and much more – all on sale at the show .	Armidale showground, Contact the organisers on (02) 6778 5122 after hours email <a href="mailto:nelfc@hotmail.com">nelfc@hotmail.com</a>
3 April 2015	<b>GEMBOREE - Victoria – The 51st National Gem &amp; Mineral Show, GEMBOREE 2015.</b>	Horsham, Victoria 3rd- 6th April 2015. <a href="http://aflaca.org.au/gemboree/">http://aflaca.org.au/gemboree/</a>
16th & 17th May 2015	<b>Lismore Gemfest.</b> Now in its "Silver Jubilee" year it is the largest annual show purely dedicated to lapidary and allied crafts. A large number of dealers and tailgaters provide minerals, fossils, cutting material, cut stones, jewellery findings, tools, machinery and finished jewellery. There are also club displays and children's activities such as gem sieving.	Lismore Showground <a href="http://www.gemclublismore.org.au/wordpress/gem-fest/">http://www.gemclublismore.org.au/wordpress/gem-fest/</a>
30th and 31st May 2015	<b>Winter Gemcraft &amp; Mineral Show Canberra Lapidary Club</b> 30th and 31st May 2015 10.00am to 5.00pm \$5 adults, \$9 family, \$2 children/concession. Gem, mineral, jewellery & lapidary dealers Minerals, fossils, jewellery, rough & cut gemstones, lapidary equipment & supplies, opals, beads & supplies. Displays of members' collections, free sessions on fossicking & gold detecting, cabbing, faceting and jewellery making demonstrations	EPIC – Mallee Pavilion More info Phone: 02 6260 5322 <a href="http://www.canberralapidary.org.au">http://www.canberralapidary.org.au</a>

Missed out on the last newsletter?

Contact [suzybrandstater@hotmail.com](mailto:suzybrandstater@hotmail.com) and it will be emailed to you.

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