



Gem & Lapidary News
December
2024

Print Post Approved PP243352/00002
ISSN 2208-5556

Vol 50

No. 11

Gem & Lapidary News is the official publication of the Gem and Lapidary Council of NSW Inc, PO Box 188 Orange 2800. The executive and workforce of the Council are entirely composed of delegates from member Clubs. Council is NOT an autonomous body. The Gem & Lapidary Council is a member of AFLACA (Australian Federation of Lapidary and Allied Crafts Association). **Life Councillors:** Joan Ball (dec), Ron Beattie, Arthur Roffey (dec), Frank Hall (dec), Dot Caladine (dec), Maurya Hutton (dec), Marie Jenkins (dec), Dick Moppett (dec) & Bob Wright (dec).

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Committee:	Sue O'Neil (Goulburn) Joe O'Neil (Goulburn) Marcia Hill (Western Suburbs)

APPOINTMENTS

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Education Officer	Paul Sabolta
GEMBOREE Coordinator	Tony Offord
State Gem & Mineral Show Coordinator	Tony Offord with Robert Porter
AFLACA delegates	Barbara Try (voting) and Tony Try (non-voting)
Social Media Officer	Kim Cooke
AFLACA J&R delegates	Barbara Try (voting) and Kathy Selwood (non-voting)
Archivist	Barbara Try

COUNCIL MEETINGS

Visitors welcome to attend

Executive - meet Monthly, fourth Wednesday of the month, 1pm, at Clubrooms, Parramatta-Holroyd Lapidary Club, 73 Fullagar Rd, Wentworthville, NSW

NEXT COUNCIL MEETING: December & AGM 11 December 2024 12:30 start

EDITOR'S NOTES

This is the last Newsletter for 2024. I hope you all have a Safe and Merry Christmas and Great New Year!

I hope you enjoy this newsletter.

If you have an article, or a show you wish to advertise in future newsletters, please send them in.

Due to increased cost for postage and printing please let the Council know if you can receive the newsletter via email only.

ADDRESSES

for the **Gem & Lapidary Council NSW**

Website : <http://gemlapidarycouncilnsw.org.au/>

The website has links to the **secretary, editor & webmaster**

Online edition of the newsletter is in colour.

Post : Gem & Lapidary Council NSW, PO Box 188, Orange NSW, 2800

Meeting rooms: Parramatta-Holroyd Lapidary Club,
73 Fullagar Rd, Wentworthville, NSW

DEADLINES:

Fourth Friday of the month—a few days grace is allowed.

CONTACT THE G&L EDITOR TO INCLUDE YOUR CLUB'S NEWS
editor@gemlapidarycouncilnsw.org.au

ADVERTISING RATES

per *G&L News* edition

(NB: printed in black & white)

Full page - \$40 1/2 page - \$25 1/3 page - \$20

Please send payment with advertising booking and copy

Disclaimer:

Opinions expressed are those of the original authors and do not necessarily reflect those of the Editor, Gem & Lapidary Council, or its members. Persons acting on any opinion, advice, fact or advertisement published in this issue does so at their own risk.

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Message from the President

Well, it is that time of the year and we are all looking forward to the Festive season. Most of the clubs are now preparing for their Christmas parties and getting ready for a short break over the festive season.

The Gem and Lapidary Council has had a great year with a very successful State Gem and Mineral Show in September and plans are on the way for next year.

There are a number of education courses that have been requested by the clubs and we are hoping to complete them in the first part of the year.

I would like to wish all the Clubs a wonderful and safe Christmas and a very Happy New Year.

Barbara J Try OAM
President



Minutes of the COMMITTEE MEETING of 27 November 2024

Starting time: 1pm

Location: Parramatta Holroyd Club

The meeting was opened at 1:00pm by President Barbara Try (Northern Districts) who welcomed delegates from the following clubs: Central Coast (Tony Try), Parramatta/Holroyd (Ray Powell), AFG (Paul Sabolta), **Western** Suburbs (Marcia Hill & Ainsley Flynn) Orange (Kathy Selwood), Port Hacking (Tony Offord), Illawarra (Joan Zealy), Blue Mountains (Mick Lane), Nepean (Nicholas Mecser), Bathurst (Robert Porter). **Apologies:** Blue Mountains (Kim Cooke), Goulburn (Sue & Joe O'Neil), Blaxland (Robert Kneale), **Moved:** Bathurst seconded Port Hacking those apologies be accepted.

Minutes of the Previous Meeting: 23 October 2024 **Moved:** AFG seconded: Central Coast that minutes be accepted.

Business Arising from last minutes:

- 1/ Purchase a computer, software, terabyte drive for backup & a small printer, To be looked at in New Years
- 2/ Reports to Secretary this meeting November for Decembers AGM, I have only 8 out of 11 so far.

Correspondence: See attached list **Business arising from correspondence.**

- 1/ Meeting dates – to general business

Moved Orange seconded Illawarra that Inward Correspondence be received, Outward Correspondence be endorsed, and business arising be approved **Reports:**

Treasurer's Report: **Moved** Orange seconded Blue Mountains that the report be accepted and accounts for payment be paid.

J&R Report:

- 1/ Change to 2025 schedule Vic – Busby trophy needs to be 3 entries not 1
- 2/ Discussion on 3D wax printing in casting section of judging manual – this is considered as commercial waxes to be bought up at GEMBOREE

GEMKHANA Competition:

- 1/ schedule for 2025, Paul to do Faceting, Barb & Kathy rest – for Jan 2025 meeting.

Webmaster: No report

G&L NEWS Editor: No report

Education Report:

- 1/ Orange minerals (delayed)
- 2/ Nepean faceting course –7 & 8 Dec 2024
- 3/ Lismore jewellery course Kathy to follow up
- 4/ Port Hacking advanced enamelling Barb to follow up
- 5/ Bathurst advanced Enamelling Barb to follow up
- 6/ Illawarra carving course Kathy to follow up.
- 7/ Illawarra Jewellery course specifically to do Claw Setting – Ainsley Flynn – next year
- 8/ NSW Lapidary Club – faceting course – postponed to 2025

Mail Person: No report

STATE GEM & MINERAL SHOW

- 1/ Banner pole key deposit not paid, so no collect.
- 2/ Indoor & outdoor contracts discussed Tony Offord to have draft by 11 December meeting
- 3/ 2025 pricing same as last year
- 4/ Catering discussed – Lions?
- 5/ Tractor inventory to be done at GEMKHANA, invoice from storage people needed.
- 6/ Permits needed from councils – Blue Mts & Penrith
- 7/ Lockable chair seating to stop outside chairs going missing

Social Media: 1/Media radius to increase from 50km to 100km at next show.

GEMBOREE 1/Parkes Showground revisit next year to be scheduled with executive

2/ Trophies, to go with Robert Porter's proposal

Reports to be accepted moved Campbelltown Seconded: Parramatta/Holroyd

GENERAL BUSINESS:

1/ Meeting dates for 2025

22 Jan, 26 Feb, 26 March, 23 April, 28 May, 25 June, 23 July,

27 August, 24 September State Gem & Mineral Show, 22 October, 26 November, 10 Dec & AGM.

2/ Discussion on how Club's accept members.

3/ Offer from NDLC's Constitution subcommittee to all clubs if interested.

4/ Members of one club ok to go on fossicking trips with another club without being members?

Under the G & L Council Association policy of which member clubs are covered it states Page 17 6.2.5 Joint Venture Liability We shall indemnify the Association for Loss, up to the Maximum Payable/Sublimit specified in the Section 6.2 Amount Payable Table, arising from any Claim against the Association first made and notified during the Period of Insurance for its proportion of any legal liability arising out of the provision of Association Services in a joint venture. MEANING:

4a/ If first club invites second club to a fossicking/outing then it is classed as a CLUB outing by the second club and would be covered by insurance.

4b/ If a person from a second club not a club member to the first club, attends the first club fossicking /outing it would not be deemed a club outing by the second club and therefore that person would not be covered by insurance. This also applies to working at another club's workrooms. Advice from Websters SA.

Meeting closed 2.30pm, Next meeting: 27th November, Parramatta/Holroyd

Meeting dates for 2024: 11 December & AGM Parramatta/Holroyd **12:30 start**

2025 GEMBOREE COMPETITION ENTRIES BALLARAT VICTORIA

Don't forget entries must reach the Competition Co-Ordinator by Saturday 18 January 2025, So if you haven't started on those entries you best start now!

See <https://aflaca.org.au/gemboree/> for details



Just over Month to go before those entries have to be in so keep going.



Correction: To the wording for the

AT 22 – Jack Bushby Trophy

Novice - Champion Facetor.

“Highest aggregate score of Entrant's best entry in any three NOVICE Faceting Sections. “

Some Mineralogy and Gemmology Basics Continued

FLUORESCENCE:

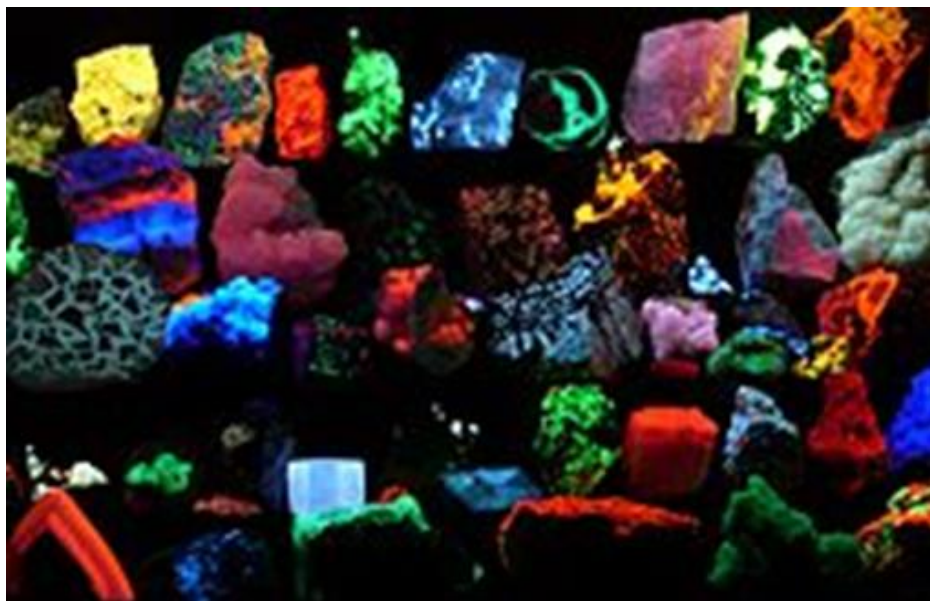
Fluorescence is a phenomenon that causes a mineral to "glow" within the visible spectrum when exposed to ultraviolet light. Minerals that exhibit fluorescence are known as "fluorescent minerals". Fluorescent minerals contain particles in their structure known as activators, which respond to ultraviolet light by giving off a visible glow.

Gemmologists use UVA of long-wave ultraviolet light or LWUV 365 nm and UVC short-wave ultraviolet light or SWUV 254 nm to assist gem identification of specimens.

There are a number of UV lights available now whether LED or fluorescent tubes. The quality of the UV light generated varies considerably, with the more expensive one using filters to remove most of the visible light and narrowing down the band of UV light emitted.

Results are quite variable as it depends on the UV source and impurities in the specimen that will restrict or stop a mineral from fluorescing (Fe – Iron is a suppressor).

We will look at this more closely in another article.



HABIT:

The characteristic shape of a mineral crystal or crystal aggregate. Habit can be described by the predominant crystal form e.g. prismatic, octahedral.

Crystal habit and form – Will be discussed under the crystallography article.

REFRACTIVE INDEX (RI):

Is a diagnostic feature of a mineral. Each mineral has its own RI value and is dependant on the optical properties of that mineral or gemstone. There are a number of methods that can be used to determine the RI of a mineral/gemstone, most but not all methods require you to have a transparent to translucent specimen. With a gemmology refractometer faceted and cabochons gemstones can be tested but never use crystals or rough minerals as they can scratch the refractometer's glass/CZ prism. There are also digital refractometers available but they vary greatly in price and performance.

We will look at RI more closely in another article.

STREAK:

Not to be done on gem material or crystal specimens as this is a destructive test. If you must perform a streak test make sure you do it on an area that cannot be seen, if you can't, then don't do it.

Use an unglazed tile (hematite - jewellers' Rouge, magnetite, galena)



Table of some minerals and their Streak

Streak	Description	Mineral
Grey	Perfect Cubic Cleavage: Heavy. SG=7.6; H=2.5; silver-grey colour	Galena PbS
Black	Magnetic; black to dark grey; SG=5.2; H=6; commonly occurs in granular masses; single crystals are octahedral	Magnetite Fe ₃ O ₄
Black	Steel grey; soft. marks paper, greasy feel; SG =2; H=1; Lustre may be dull	Graphite C
Greenish-Black	Golden yellow colour; may tarnish purple; SG=4.3; H=4	Chalcopyrite CuFeS ₂
	Brass yellow; cubic crystals; common in granular aggregates; SG=5; H=6- 6.5; lacks cleavage	Pyrite FeS ₂
Reddish-Brown	Steel grey – black to dark brown; granular, fibrous or micaceous aggre- gates; single crystals are thick plates; SG=5; H=5-6.5; lacks cleavage	Hematite Fe ₂ O ₃
Yellow-Brown	Yellow, brown or black; hard struc- ture less or radial fibrous masses; SG=3.5-4; H=5-5.5	Limonite Fe ₂ O ₃ +H ₂ O

COLLECTION

Part of the enjoyment of mineralogy and Gemmology is starting your own collection. It is advisable to catalogue your collection as you acquire specimens and note down the specimen's name, location, cost, where and whom you acquired/purchased it from. Whether you use an Excel spreadsheet, dedicated data base or design your own (MS Access Libreoffice Base), note book, free or commercial collecting software, you will thank yourself later if you do this right the first time. It should be noted that most data bases and collection software allow you to import or export information via spreadsheets. Whether storing and displaying your specimens:

You should be consistent i.e. all quartz together, fossil together or alphabetical for each group or just alphabetical.

In museums and textbooks (some collectors also), specimens are stored and/or displayed in chemical groups.



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THE FOLLOWING ARE THE CHEMICAL GROUPS WITH SOME EXAMPLES:

NATIVES – Un-combined Elements

Gold(Au), Silver(Ag), Copper(Cu), Platinum(Pt), Tin(Sn), Aresenic(As), Bismuth(Bi), Sulphur(S 8), Carbon (C) (graphite and Diamond)

SULFIDES

Pyrite(FeS_2), Chalcopyrite(CuFeS_2), Bornite(Cu_5FeS_4), Cinnabar(HgS), Galena (PbS), Sphalerite(ZnS), Molybdenite(MoS_2), Arsenopyrite (FeAsS), Millerite(NiS), Stibnite(Sb_2S_3)

OXIDES

Corundum(Al_2O_3), Spinel(MgAl_2O_4), Chrysoberyl(BeAl_2O_4), Rutile(TiO_2), Ilmenite(Fe_2TiO_3), Hematite(Fe_2O_3), Magnetite($\text{Fe}_2\text{Fe}_3\text{O}_4$), Cassiterite(SnO_2), Cromite($\text{Fe}_2\text{Cr}_3\text{O}_4$), Goethite($\alpha\text{-Fe}_3\text{O(OH)}$)

HALIDES

Halite(NaCl), Fluorite (CaF_2), Atacamite ($\text{Cu}_2(\text{OH})_3\text{Cl}$)



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CARBONATES

Calcite(CaCO_3), Aragonite(CaCO_3), Dolomite($\text{CaMg}(\text{CO}_3)_2$), Cerussite(PbCO_3), Malachite($\text{Cu}_2(\text{CO}_3)(\text{OH})_2$), Azurite($\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$), Rhodochrosite (MnCO_3), Smithsonite(ZnCO_3)

SULFATES

Gypsum($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$), Barite(BaSO_4), Celestine (Celestite)(SrSO_4)

PHOSPHATES

Apatite($\text{Ca}_5(\text{PO}_4)_3(\text{Cl}/\text{F}/\text{OH})$), Turquoise($\text{Cu}(\text{Al}, \text{Fe}^{3+})_6(\text{PO}_4)_4(\text{OH})_8 \cdot 4\text{H}_2\text{O}$), Variscite($\text{AlPO}_4 \cdot 2\text{H}_2\text{O}$), Amblygonite($\text{LiAl}(\text{PO}_4)\text{F}$)

CHROMATES

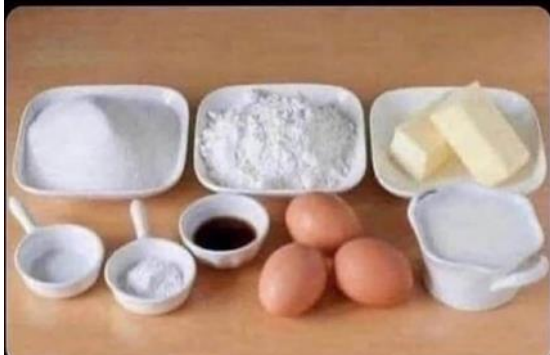
Crocoite(PbCrO_4)

SILICATES

>90% Earth's Crust

quartz(SiO_2), feldspars($\text{KAlSi}_3\text{O}_8 - \text{NaAlSi}_3\text{O}_8 - \text{CaAl}_2\text{Si}_2\text{O}_8$), zeolites(), olivine($\text{Fe}^{2+}\text{SiO}_4$ to Mg_2SiO_4), epidote($\{\text{Ca}_2\}\{\text{Al}_2\text{Fe}^{3+}\}(\text{Si}_2\text{O}_7)(\text{SiO}_4)_2\text{O}(\text{OH})$), tourmaline($\text{A}(\text{D}_3)\text{G}_6(\text{Si}_6\text{O}_{18})(\text{BO}_3)_3\text{X}_3\text{Z}$), Garnet group ($\text{X}_3\text{Z}_2(\text{SiO}_4)_3$), Zircon($\text{Zr}(\text{SiO}_4)$), Andalusite($\text{Al}_2(\text{SiO}_4)_2\text{O}$), Kyanite($\text{Al}_2(\text{SiO}_4)_2\text{O}$), Topaz($\text{Al}_2(\text{SiO}_4)(\text{F}, \text{OH})_2$), Diopside($\text{CaMgSi}_2\text{O}_6$), Talc($\text{Mg}_3\text{Si}_4\text{O}_{10}(\text{OH})_2$), Mica (Muscovite – $\text{KAl}_2(\text{AlSi}_3)\text{O}_{10}(\text{OH})_2$)

The manager at the local IKEA is retiring,
so I sent him a cake.



The three hardest
things to say are:
1. I was wrong
2. I need help
3. Worcestershire
Sauce

Illawarra Lapidary Club Gem Show 2-3 November



Canberra Lapidary Club Gem Show 2-3 November



EVENTS

General information on which events are going ahead and which have been cancelled, can be found on the following link:

<https://gemlapidarycouncilnsw.org.au/events/>

- ◇ **8 March 2025** Campbelltown & Districts Lapidary Club Inc
Open Day 9 am—3 pm Bensley Road, Macquarie Fields
- ◇ **15-16 March 2025** New England Lapidary Club, Annual Gem & Craft Show, Armidale Showground, Armidale, NSW. Contact Mick 6778 5122 or Kerry 0407 308 620, Mick 0474 726 441, email: nelfc@hotmail.com
- ◇ **20-23 March 2025** Thursday, Friday, Saturday and Sunday - Sydney Stamp & Coin Expo 2025 , Wentworth Park Sporting Complex very close to the Sydney CBD
- ◇ **22-23 March 2025 Canberra Rock Swap**, Parrot Park, EPIC (Exhibition Park) off the Federal Highway), Mitchell, ACT. Contact canberralapidary@gmail.com - Norm Menadue on (02) 6258 6631
- ◇ **18-21 April 2025**. Gemboree, Ballarat, St Helens Campus of the Federation University, Victoria.
- ◇ **24-25 May 2025** Canberra Lapidary Club Winter Show, Mallee Pavilion EPIC, Mitchell, ACT. Contact canberralapidary@gmail.com- Norm Menadue on (02) 6258 6631
- ◇ **1-2 November 2025** Canberra Lapidary Club Spring Show, Mallee Pavilion EPIC, Mitchell, ACT. contact: canberralapidary@gmail.com- Norm Menadue on (02) 6258 6631